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Saskatchewan Horse Industry
-
An Economic Perspective

Conducted by Jim Webster and Robert Bens

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SASKATCHEWAN HORSE INDUSTRY

AN ECONOMIC PERSPECTIVE

by

A. JIM WEBSTER, P. AG.
President, EXP Consulting Limited

and

ROBERT J. BENS, P. AG.
Director, FarmWest Management Ltd.

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EXECUTIVE SUMMARY

Introduction

The objective of this study was to develop an economic perspective of the Saskatchewan horse industry. This was achieved by compiling accurate statistics on horses and horse owners, determining investment and annual expenses for various categories of horse use and finally utilizing this information, in combination with cash inflow and outflow on horse related activities, to develop a total economic perspective.

Horse Statistics

Twelve thousand persons in Saskatchewan own 62,500 horses. About 1500 horse owners are considered urban residents with the remaining 10,500 being categorized as farmers.

About seven hundred horse owners use their horses exclusively for a horse business while 10,300 use their horses for recreation, coupled with farm work in some cases. An additional 1000 owners used their horses in a combination of the business and recreation categories.

Owners who use horses for business purposes average 17 horses per owner in contrast with an average of 3.8 horses per owner for the recreation use category. In the horse business category, use for breeding (22.8%) and pregnant mares urine production (PMU) (27.4%) are the most significant.

At least two-thirds of the horses used in PMU production are of draft breeds or heavy horse crossbreeds. In the recreation and farm work category, recreation use accounted for 45.7% followed by working saddle at 39.2% Nearly 43% of the horses in this category are of the quarterhorse breed with Arabians second at 10.8%.

Thirty-three hundred (3300) owners reported nearly 8000 breeding mares and over 1400 stallions. About one-third are registered and two-thirds are grade for both mares and stallions. Of the

3300 owners of breeding horses, 350 own 6 or more registered mares with 48 of these keeping over 20 mares. Three quarters of all breeding mares foal at an average 18 month interval.

While nearly 900 owners said they were in the breeding business, only the 350 owners with 6 or more mares were considered by the study team to be substantially in the breeding business. Sixty seven owners of thoroughbred breeding mares and nine owners of standardbred breeding mares specialize in the breeding business and do not participate in racing activities.

Participation in horse events is a high priority among horse owners. They make 21,500 event entries annually with 92% of these being events held in Saskatchewan. Entries at fairs and exhibitions are the biggest item at 32.5% with trail rides and parades being second and third in popularity.

A majority of the recreation horse owners enter one or two events per year but a small number (about 300) enter over ten events per year and 185 owners each make about 20 entries per year at fairs and exhibitions. These are believed to be the owners of high quality stock who travel the circuit during the show and exhibition season.

Saskatchewan horse owners are very active in horse marketing. During the 12 months preceding the study, 25% of owners sold 20,500 horses and 21% of the owners bought 13,850 horses. About two-thirds of this trade was for feedlot and/or slaughter.

Investment and Annual Expenditures

The average Saskatchewan horse owner has $4,650 invested per horse and annual operating costs of $790 per horse. Investment in horses accounted for $1,600 or 34.5% of total investment while feed costs at $320 per horse represented 40% of annual operating costs. Annual expenditures and investment per horse were not related to scale of operation.

There were wide variations in investment and annual costs between the 10 sub-groups of horse use. For example, in the horse business category, Thoroughbred racehorses had four times the investment level of rodeo horses. In the recreation or work group, competition and event horses

had almost three times the investment level of working saddle horses. Similar variability was found in annual operating expenses.

There was no consistent evidence of any causal relationship between the number of horses owned and investment or expenditure levels on a per horse basis. Factors such as the personal style and financial capability of the owner, and the type of horse use, appear to be more important determinants than scale effects.

Economic Impact

The total investment by horse owners in Saskatchewan was estimated to be $290 million, of which the major components were $100 Million invested in horses, $43 million invested in farmland, and $147 million in other depreciable assets. Annual cash operating expenses by horse owners in Saskatchewan were estimated at $49 million, with an additional annual replacement requirement of $21 million.

Cash inflows to horse owners were estimated at $26 million, with this revenue coming about evenly from inside and outside the Saskatchewan horse industry. This level of cash inflow falls short of meeting annual operating expenses. This is to be expected since most of the expenditure is associated with the recreation side of the industry. Revenue flows to the legitimate horse business sector are probably sufficient on average to cover annual expenditures.

As in any competitive industry, above average operators are able to generate profits and provide returns to their own labour and equity. This is particularly true for those horse business operations where personal recreation objectives are secondary to business goals. This qualification may apply to about half of the "horse business" population.

Total investment of $290 Million and annual operating expenditures of $70 million are split about 50–50 between horse business owners and owners of horses for recreation and farm work. Horse business owners have total investment averaging $100,000 per owner while the other owners have average investment of about $24,000 per owner.

Most of the human resource requirement for the horse industry and associated events is supplied by unpaid volunteers. About 225 person years of volunteer labour is required to operated 300 horse clubs and associations, and to organize and deliver 480 annual horse industry events.

There are 700,000 spectator days associated with horse events. The revenue flows to communities and event organizations in terms of spectator expenditures, probably exceeds the total revenue flows from all sources to horse owners.

Conclusions and Recommendations

Horse industry activities provide an important element of the local recreation and entertainment scene in Saskatchewan. It is in the best interest of the horse industry to build on this strength and also to expand into the area of marketing horse related recreation on the farm or ranch. These activities would be directed toward taking advantage of an opportunity for entrepreneurs to develop family recreation services featuring horses in a rural setting.

To assist in this development, it is recommended that the appropriate Saskatchewan horse associations receive assistance from the Saskatchewan Department of Economic Development and Tourism in a review of Small Business Assistance policies. Meetings and seminars should be held for interested horse owners toward helping potential entrepreneurs in identifiying and developing business opportunities.

The study identified an emphasis on horse events at a wide variety of community programs, including feature horse shows, exhibitions and fairs, homecoming events and sports days. Receipts by event sponsors and community businesses resulting from spectator expenditures at these events, are calculated to be equal to or greater than total cash receipts by horse owners for all activities. This high level of participation in community events by horse owners should be maintained, and improved from a quality point of view. Toward this objective, programs are recommended to encourage breeders to put maximum effort into quality improvement. This will have far reaching benefits because the quality improvement will eventually be transferred to the larger horse population, thereby enhancing the competative position of Saskatchewan horse owners and also increasing the entertainment value of the horse events.

Increased emphasis on Top Breeder Awards is recommended. Programs and policies directed toward this objective will be most effective if introduced on a sharing basis between horse associations and the government. The impact of these awards would be mainly in terms of drawing public attention to improving quality of horses, and providing an added element of prestige and competition as well as a note of optimism in the industry.

Increased educational and training programs for 4–H club members and other young horse owners are recommended. More clinics and other educational programs should be supported jointly by horse associations and government. These programs will achieve the combined advantage of developing more and better instructors while at the same time increasing the ability of young horse owners in managing and exhibiting horses and also better understanding the rigid requirements of breed improvement.

A relatively small number of horse owners who keep horses for business purposes operate a profitable horse business enterprise. This profitable type of business enterprise requires more attention in the industry including a careful search for new business endeavours. More effort is required by the Department of Economic Development and tourism and the horsemen's associations towards identifying market opportunities and developing profitable horse businesses.

The use of horses and horse events should be utilized by the Government of Saskatchewan to a much larger extent in tourism promotions. A more complete listing of horse events should be undertaken toward this end. As well, opportunities exist for promotion of horse recreation activities in provincial parks. This would involve provision of horse trailer parking facilities, corrals, shelters and riding rings and contracting with horse entreprenuers to service these facilities.

The "community" level of barrel racing, chariot and chuckwagon racing and quarterhorse racing at many locations around the province is presently quite successful. However, further study is justified to determine if measures can be undertaken to improve their entertainment value and increase financial returns. Thoroughbred and Standardbred racing on the other hand, require a

careful examination to determine what can be done to prevent large economic losses impacting on both horse owners and the associations sponsoring these race meets.

All consultants, specialists and agencies who worked on this study reported great pleasure and satisfaction in having had the opportunity to do so. The pleasure of working on this project was due largely to the enthusiastic willingness of Saskatchewan horse owners to contribute helpful information. Saskatchewan horse owners seem to share a consistent desire to assist in any way they can toward the improvement of the horse industry.

INTRODUCTION

The purpose of this study was to develop a comprehensive economic perspective of the Saskatchewan horse industry.

The study contract was awarded to Agdevco who sub–contracted the project to EXP Consulting Limited of Regina, Saskatchewan. While EXP Consulting Limited assumed full responsibility for the study, Farm West Management Ltd. of Saskatoon, Saskatchewan was engaged to undertake portions of the study dealing with horse related investment, annual expenditures and the economic impact of the horse industry on the Saskatchewan economy.

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1. STUDY METHODOLOGY

To develop an economic perspective of the horse industry in Saskatchewan, it was necessary to: (a) provide an accurate count of horses with information on various categories of horse ownership and horse use; (b) establish annual expenditures per horse and average investment per horse for the various categories of horse ownership and horse use; and (c) identify the economic impact of the horse industry.

The per horse annual expenditure and investment values were applied to the horse numbers to calculate the total investment and annual expenditures of horse owners in Saskatchewan. These figures were then combined with the economic impact assessment to arrive at a total economic perspective of the industry.

1.1 LITERATURE REVIEW

Library services in the Saskatchewan Department of Agriculture and Food conducted a computer library search of literature sources throughout North America. This search produced references to nine major reports on the horse industry covering various geographic areas and a variety of areas of interest. In addition, a very large number of abstracts, newspaper editorials, and other published statements were identified. Of these, eleven were reviewed in some detail for purposes of this study.

1.2 HORSE STATISTICS

EXP Consulting Limited provided the agricultural division of Statistics Canada with membership lists of the various breed clubs and horse associations in Saskatchewan. The Agricultural Division was then sub–contracted to remove the duplication of names and addresses among the various horse association lists and the Statistics Canada Central Farm Register. This enabled Statistics Canada to compile a single list of horse owners. A sample of 2,938 names of horse owners was then selected from the master list with which Statistics Canada conducted a survey by telephone interview.

In addition to the telephone survey, a survey was conducted by EXP Consulting Limited to collect statistics from Indian reservations in Saskatchewan. In this case, a knowledgeable person from the agricultural board for each reservation, was selected to provide the detail on the horse population for the reserve.

1.3 PER HORSE COSTS

A separate study was conducted by Farm West Management Limited to provide data on investment and annual expenses on a per horse basis for ten separate horse categories. This survey was conducted on a personal interview basis. The questionnaire and information on interview procedures is provided in Appendix 2.

1.4 ECONOMIC IMPACT

An economic impact analysis was conducted by Farm West Management Limited utilizing a variety of sources of information to develop an overall perspective of horse related economic activity in Saskatchewan. This economic impact analysis is based mainly on information in chapters 3 and 4. The focal points for the economic impact analysis include total investment by horse owners, annual expenditures, expenditures by service sector, direct employment and attendance by spectators at horse events.

1.5 CONCLUSIONS

This study has produced a large quantity of primary data on the Saskatchewan horse industry. Based on reliable information on horse related activities, an economic perspective of the industry has been developed. The study team was not able to identify any other horse study on the North American continent which utilized as much primary data as has been produced and used in this study.

2. LITERATURE REVIEW

2.1 OBJECTIVE OF THE LITERATURE REVIEW

The objective of this study is to examine the Saskatchewan Horse Industry from an economic perspective. To achieve this, the study examines:

1. Numbers of owners;
2. Numbers of horses by use and type;
3. Total capital investment;
4. Annual expenses; and
5. Total economic impact.

2.2 LITERATURE REVIEWED

A library search by computer, for relevant literature, was conducted through the Saskatchewan Department of Agriculture and Food Library. The literature identified by the library included a number of North American studies conducted by individuals, companies, associations and government branches. Most of these horse industry studies were limited to certain aspects of the industry and do not provide a comprehensive profile. A study by Woods Gordon, [18] The Economic Impact of the Horse Industry in Canada provides the most valuable reference.

The most relevant studies and articles in the USA were: a 1987 report from New Jersey (13) which related the horse racing industry to other sports in the state; and articles and abstracts based on studies in Missouri, Kentucky, New York, Arizona and Texas. The overwhelming focus of the American literature is on elements of the horse racing industry such as breeding, taxation and development opportunities. There were no clear implications in terms of methodology or results of real significance to the present study. The horse environments, history and population base in these areas in the USA bear few similarities to Saskatchewan.

Several Canadian studies offer valuable insight into popular research methodology applied to the Canadian horse industry. These include studies done in P.E.I., Ontario, Alberta and two studies

done at the national level. The focus in the literature is overwhelmingly on the racing side of the industry.

In 1972, a study entitled Alberta Light Horse Industry (20) was conducted by the Alberta Department of Agriculture. The report notes that Statistics Canada was undercounting the horse population in Alberta by 20% because riding stables, race tracks and Indian reserves were not included in the sample. A mail questionnaire was sent to 2,000 horse owners in Alberta, soliciting responses under the categories of Breeder, Pleasure Horse Owner, Dude Ranch, Racing Stable, Boarding School, Farmer-Rancher and Other. The names were taken from Breed Association lists, horse show, rodeo and racing lists; and names from the horse industry population selected by the authors. An unspecified number of personal interviews were also conducted.

A 25% response to the Alberta mail questionnaire was achieved, generating data on the number and type of horses, racing activity, and investment and annual costs of horse owners. About 70% of the respondents owned horses for personal recreation, 5% as a sole business, 10% as a profitable part-time business and 10% as an unprofitable part-time business. Specific data on costs, returns and profitability were difficult to obtain because of confidentiality considerations. For example, 50 stores carrying horse equipment were contacted but 80% did not want to disclose their finances. For horse operations, only boarding schools and racing stables reported net income.

The Alberta Light Horse Industry Study produced 24 recommendations, headed by a suggestion for an effort to co-ordinate information on horses in Alberta and establish responsibility for making this information available to the public, without promoting any particular breed or type of event. Other key recommendations included the charting of riding trails, providing corrals and facilities at campsites, and low interest loans for "part time" horse businesses.

This Alberta report notes, as do most other reports, a general government failure to recognize the light horse industry as a legitimate farming enterprise.

In 1980 a study entitled Prince Edward Island Horse Industry – A Study of Opportunities was conducted (15). The objectives were to determine the size of the industry, identify constraints and make recommendations. A "census" questionnaire was sent to about 1,200 people with a 60% response rate. The questionnaire was followed up by telephone or personal interviews to complete the remaining 40%. A follow-up detailed questionnaire was sent to 600 selected respondents, but only 18% were returned.

The study results were limited by the low response across all groups. However, seven of eight standardbred breeders who responded indicated a net loss on their operations. An interesting quote (P.65) is noted here: ". . . horse owners have traditionally lost money racing horses. The expectation is not there to make money. It is extremely pleasant if it happens, but not expected. The tracks, on the other hand, have to at least break even to be in business."

The P.E.I. study produced many recommendations, including key items such as government prizes for local entries at competitions and shows to encourage the use of better breeding stock, increasing the percent of take on "feature" races deducted for track operations, increasing government assistance to sires stakes races and generally providing more money to the horsemen.

In 1982, a study of The Ontario Racing Industry: Its Economic Problems, Potential and Solutions (12), was completed at the University of Guelph. The study explains the unique economic characteristics of racing, and contains a bibliography listing 49 references on topics associated with horse racing, wagering, taxation and the market for gambling. The study reports the cost of putting a horse on the circuit in Ontario, and provides an illustration of how various tax scenarios on race track wagering affect the takeout. The author suggests that a reduction in the parimutual take-out would improve the economics of the racing industry considerably without significant reduction in provincial revenues. He concludes that reconstructing the present tax on race track wagering by implementing a gain tax (in place of the present gross wagering tax) would increase purses, race track revenues and consequently, personal revenue for horse owners. This, he suggested, could result in racing becoming a profitable enterprize.

In 1984, a study was completed in British Columbia entitled Horse Industry Study (8). The major focus was on domestic and international marketing opportunities for B.C. purebred horses and for the potential for horsemeat.

A total of 36 mail questionnaires were sent to major breed associations in Canada and the USA and 45 interviews were conducted with representatives of breed associations and purebred breeders in B.C. and other provinces.

The study notes deficiencies in existing data for B.C. due to problems with Census definitions and the Canadian National Livestock Records. The study cites the results of a survey undertaken by the B.C. Ministry of Agriculture in 1981 which provides data on horse count by breed and type of use. Investment and annual expense estimates are provided for four categories of horses, namely: racing; top competition; general competition; pleasure and ranch. Pleasure and ranch horses (87% of the horse population) are valued at $900, general competition (8%) at $3,000, racehorses (5%) at $6,000, and top competition horses (less than .5%) at $20,000.

The report provides details of track takeout and grants, awards and supplements paid to breeders and owners in B.C. The report also describes the domestic and international market. The major marketing opportunities are listed as replacing current imports, and expanding exports to the USA. To expand exports, the report concludes that ". . . it is necessary for B.C. horses to participate and win in national and international horse shows."

The B.C. report also states that Canada is fourth in the world as a horsemeat exporter with 7% of the market after the USA, Argentina and Brazil. The main markets for horsemeat are France and other European countries and Japan. The report concludes that there is little growth potential for domestic consumption in Canada, and that low priced product from South America and Europe provides formidable competition in the export trade.

Major constraints on the B.C. industry were identified in terms of a lack of data on the size and economics of the horse industry in B.C.; the need to improve local quality; and existing tax regulations which limit "farm losses" which may be deducted from other income.

In 1985 a report on The Economic Impact of Horse Racing in Canada (19) was published by Woods Gordon, Management Consultants. The study used data available from government and industry sources across Canada. A total of 16 sources of information are given in the bibliography.

The report states that estimates of economic impact are difficult because of a lack of appropriate definitions and classifications. Horse events are geographically dispersed and locally organized, and roles such as horse trainer and horse owner are often played by the same individual.

The study identified three dimensions of economic impact, including employment, income, expenditure on goods and services. Attendance by spectators was also cited as an important factor, which at 13 million in 1983 surpassed attendance at all professional sports combined and attendance at all live cultural events.

As a gambling opportunity, paramutuals were cited as having good odds because about 80% of the wager is returned, as opposed to less than 48% for lotteries.

The report provides a source and disposition of operating revenues for 1983. The net cost of wagering at $339 million is reported as the difference between the handle and the amount paid to patrons. The total contribution by owners is presented as a net inflow of funds (a loss on operations by owners) of $223 million, in order to balance the flow of funds for the racing industry.

This translates into a loss of $1,274 per horse spread over a racehorse population of 175,000. Purses and grants are $788 per horse. The estimate of annual operating costs (not counting investment in assets) is therefore about $2,000 per horse.

For estimating indirect employment, Woods Gordon notes a lack of information about multiplier effects in the horse industry. The consultants used an "arbitrarily based" multipliers of 1.2 x

direct employment in horse and track operations and 1.4 x direct employment in associated services such as tradesmen, veterinarians, associations, etc.

In 1986 Woods Gordon published a second report, entitled The Economic Impact of the Horse Industry in Canada (18). A total of 42 sources of information are listed. No new data were collected and a variety of estimation procedures were used to arrive at a "horse count". The following classifications are used to group horse related activities: breeding, racing, own pleasure riding, own show riding, commercial riding establishments, farm and other work, ranch, and police horses. As in most of the literature, the problem of overlap between classifications is noted in the report.

The report indicates that 220,000 Canadians own horses and 100,000 are directly employed. An estimated 16 million spectators attend shows, rodeos and races annually.

About 90% of horse owners use their horses for their own pleasure or for work on the farm. This feature helps to explain why most of the labor devoted to the industry is unpaid time provided by horse owners.

The report estimates employment, investment in horses, operating expenditures, tourism and related impacts, government revenues and balance of trade.

There were an estimated 630,000 horses in Canada, made up of registered quarter horses (17%), registered standardbreds (13%), registered thoroughbreds (9%), registered heavy horses (3%), other registered (6%) and grade horses (52%).

Average horse values range from $1,000 for work horses to $16,500 for racehorses on the track. Total capital investment was estimated at $3.1 billion, with the racing industry at $2.5 billion. An estimate of "annual capital expenditure" of $5.6 billion in assets was arrived at by dividing the capital investment by a "15 year average life", resulting in a figure of $380 million per year in Canada. No estimates are given for economic spinoffs associated with this level of annual expenditure.

Operating expenditures are estimated for feed, farriers, tack, veterinary and medicine, track operations and other (including advertising, travel, insurance, miscellaneous, etc.) for nine classifications of horses under five general categories including breeding, racing, rodeo, pleasure and work horses. Annual expenses per horse are estimated in a range of $4,600 for racehorse operations, $3,600 for breeders, $2,900 for rodeo horses, $1,500 for pleasure horses, and $1,100 for work horses. The total annual expenditure for these items for these 5 horse groups is estimated at $1.7 billion, or $2,700 per horse for a total horse population of 630,000.

In 1986, a study of Alberta's Racehorse Breeding and Racing Industries: Opportunities and Constraints (7), was completed by Deloitte, Haskins and Sells. The report is divided into two sections, which focus on the breeding and racing industries separately.

The objective for the breeding industry section was to identify market opportunities and constraints for Alberta-bred racehorses. A review of the racehorse industry in Ontario and the USA was undertaken. A total of 43 interviews and information contacts were completed. Four focus groups of 10 to 15 people were used to identify constraints to racehorse breeding in Alberta. Over 80 breeders and owners were contacted.

The study reports 7,000 horses on racehorse operations, 400 "major breeding/training farms" and 240 horse trainers. The average sale price of Alberta racehorse foals was estimated at $1,845 for 1985, representing a decline of more than 50% from 1982. Sale prices for thoroughbreds sired or bred in Alberta were reported as usually about 1/2 the price of non-Alberta animals, indicating perceived lower quality of Alberta stock in the market.

Annual costs for hay and pasture, grain and feed, bedding, utilities and maintenance, veterinary services and medicine, track and equipment, farrier, transport, horse insurance, labour, other services, breeding fees, and interest on investment, are estimated at about $4,000 per horse.

As for the economics of the business, the report states that ". . . one of the findings of the breeder survey was the very poor financial health of most breeders. Several large well-known farmers

have recently left the industry and a large number of breeders have either down-sized significantly or quit breeding."

The study uses a racehorse/jobs ratio of 5:1 for breeding farms, with investment of $5,700 per horse and annual costs of $1,314 per horse.

The authors estimate that 20% of the breeding stock and farm value is replaced annually. A multiplier of 3x the "annual replacement" plus annual expenses for feed, vet, farrier, transport, insurance and related farm expenses, is used to estimate the "total regional effects" of about $75 million to the economy."

The main constraints to development of racehorse breeding were identified as a lack of overall management for the industry and lack of government funding for racehorse breeding; the high drop out trend due to poor economics and the need for quality upgrading of Alberta stock; and tax laws which limit losses which may be claimed against other sources of income.

The second part of the study focused on the racing industry itself. Racing programs in New York, New Jersey, Kentucky, Illinois, California, Ontario and Alberta were reviewed in some detail. A review of economic impacts of racing in the USA, Canada and Alberta is given. The main conclusions are that more Alberta-bred incentives are needed, Section 31 of the Income Tax Act needs to be changed, there is an over supply of poor quality stock, and more promotion and better communication is needed on an industry wide basis.

The study recommends a standing industry advisory committee to develop a long term plan including incentive programs, a horse classification system, promotion and marketing programs and investigation of owner economics, credit, horse quality, training, and management needs.

In 1988 a Characteristic Profile of the Saskatchewan Horse Industry (17) was completed. The objectives were to develop a profile including: a classification of the horse population; annual revenues generated from horse sales, racing, PMU and slaughter; annual revenues generated from sale of feed, tack, equipment and other supplies; the number of people involved in the horse

industry and the number of associated jobs; and, estimates of the multiplier effect for the horse industry.

Data from several sources was reviewed, and personal interviews were conducted within the industry. A mail questionnaire was distributed to 200 names selected from club membership lists. Sixty-two were returned, for a response rate of 31%.

Although the report is unpublished, several interesting points should be noted. The horse population in Saskatchewan was estimated at 70,000 for 1986, divided between pleasure and working saddle (83%), racing (7%), heavy (5%), PMU (5%) and slaughter (12%).

Annual operating costs for feed, animal care, supplies, stabling and transportation, training, membership fees are estimated at about $940 per horse. The total amounts spent are estimated to include feed ($12 - 15.7 M) and animal care ($4 M).

The farmgate revenues are estimated, including: PMU ($3.7 M); slaughter ($2.4 M); local auction and USA exports ($4 M); and racehorse owners share of wagering ($1.5 M). The report identifies 62 horse related clubs, with 3,800 members in Saskatchewan.

In 1988, the Saskatchewan Standardbred Horseman's Association presented a brief to the Saskatchewan Government regarding problems in the Regina racing program. The cancellation of the 23 week winter live racing season at Queensbury Downs in Regina was reported to be associated with the disappearance of over 100 full-time job equivalents.

Trends in declining handle and a declining percent for the horseman had reduced the payout to horse owners by 100% compared to previous years. The loss of momentum in 1988 for the Saskatchewan live racing industry is identified as a severe problem which will ultimately benefit Assiniboia Downs in Manitoba and tracks in Alberta.

3. SASKATCHEWAN HORSE INDUSTRY STATISTICS

3.1 METHODOLOGY

A list of Saskatchewan horse owners was compiled by Statistics Canada. Sources of information were:

(a) Farmers reporting horses in the Census of Agriculture, June 3, 1986; and

(b) Membership lists of various horse associations in Saskatchewan.

The process of compiling a master list of horse owners was as follows:

Step I – EXP Consulting Limited contracted with Statistics Canada to conduct a telephone survey of Saskatchewan Horse Owners.

Step II – Lists of Saskatchewan Horse Owners were supplied to Statistics Canada by the study team.

Step III – Statistics Canada removed all duplication of names from the membership lists and the Statistics Canada Central Farm Register.

Step IV – A sample of horse owners was drawn by Statistics Canada for purposes of conducting a telephone survey.

Step V – A survey questionnaire was prepared by the study team.

Step VI – The telephone survey was conducted by Statistics Canada, the data were compiled and the results analyzed.

3.1.1. Lists of Saskatchewan Horse Owners

A genuine interest among Saskatchewan horse owners in assisting the study team to develop a better information base on the Saskatchewan horse industry, resulted in membership lists being made available by the following Saskatchewan horse associations:

(a) The Saskatchewan Horse Federation;

(b) The Canadian Thoroughbred Horse Society – Saskatchewan Division; and

(c) The Saskatchewan Standardbred Horsemen's Association.

3.1.2. Involvement of Statistics Canada

The above lists provided the names and addresses of nearly 4,000 Saskatchewan horse owners which were forwarded to Statistics Canada in order that they could be matched against the names and addresses of the Farm Register. After removal of duplication, approximately 1,500 names of Saskatchewan horse owners remained to be added to those of the Farm Register for purposes of compiling the sample frame population. A stratified sample of 2,938 names was drawn from the list as noted below:

Sample Frame	Population	Percentage Selected	Sample Size
1. Farm Register (1986 Census Farms Reporting Horses)*			
Owners with 1–7 Horses	11,499	13	1,550
Owners with 8–17 Horse	1,260	33	420
Owners with over 17 Horses	446	100	446
2. Additional Names			
Sask. Horse Federation List	1,131	16	182
Standardbred Membership List	105	100	105
Thoroughbred Membership List	114	100	114
Other	121	100	121
Total Sample			**2,938**

* Farms with at least $250 of agricultural sales during the previous 12 months.

A total of 2,909 interviews were conducted utilizing a questionnaire which was jointly developed between EXP Consulting Limited and Statistics Canada. The results of the

telephone survey were then compiled by Statistics Canada and utilized in the production of this report.

3.1.3. Statistics from Saskatchewan Indian Reservations

Arrangements were made by EXP Consulting for a survey of 67 Saskatchewan Indian Reservations (I.R.s) under the leadership of agricultural district board representatives covering each of the six agricultural regions into which the Indian Reservations have been grouped. Under the leadership of these agricultural district board representatives, one questionnaire was completed for each of 57 Indian Reservations with horses (10 reserves have no horses). These completed questionnaires contained information on the total number of horse owners and horses on each reservation.

3.1.4. The Questionnaire

A questionnaire to be administered by telephone survey conducted by Statistics Canada was prepared by the study team with advice and assistance from the project steering committee. A copy of the questionnaire is presented in Appendix 2. The questionnaire survey was conducted by telephone interview by a team of Statistics Canada interviewers. The same questionnaire was utilized for purposes of the survey of Indian Reservations.

3.1.5 Data Collection

The telephone survey was conducted between September 18 and September 29, 1989. Data capture and tabulation was completed by December 16, 1989. Statistics for the 57 Saskatchewan Indian Reservations with horses were provided by one person for each reservation. In the case of Indian Reservations, only questions one to five inclusive were completed for all I.R.s and therefore these are the only data included in this report.

3.1.6 Data Analysis

Statistical tables were formatted by the study team before the telephone survey was conducted. This enabled computer programming to take place in advance of the telephone survey. Consequently, production of 30 tables of statistics was possible shortly after completion of the survey.

3.2 STATISTICAL FINDINGS

3.2.1 Numbers of Owners, Numbers of Horses and Horse Use

In 1989 there were 62,500 horses in Saskatchewan owned by 12,000 persons (Table 1). These figures include 417 owners on Indian Reserves with 3,825 horses. Of the 12,000 owners, about 10,500 are categorized as farmers while the remaining 1,500 are urban horse owners.

The master list of horse owners consisted of 14,676 names and addresses. This list was comprised of 13,205 names from the 1986 farm register and 1,471 additional names and addresses supplied by Saskatchewan Horse Associations.

Of the 2,939 names drawn from the total list, six did not wish to be interviewed and twenty-four could not be contacted. Interviews were completed with the remaining 2,909 persons sampled. The Statistics Canada Interviewers reported that interview respondents were generally pleasant, enthusiastic and willing to answer questions.

An effort was made to include new horse owners since the 1986 census by updating the Central Farm Register list with Horse Association lists. The questionnaire asked respondents to indicate if they kept horses for others. Those who said they kept horses for others were contacted a second time in an attempt to determine if the owners of the horses being kept were included in the sample frame. The results of this follow up survey indicated that about 6% of Saskatchewan horse owners were not in the sample frame and the data were adjusted by Statistics Canada accordingly. In general, all evidence suggests a decline of about 3,000 horses in Saskatchewan during the twelve months preceding the survey.

Study findings are deemed to be reliable on the basis of reconciliation with the 1986 census figures on horses. There were 67,000 horses on farms in 1986. Findings from this survey indicate about 4,000 horses can be added to this number to cover horses owned by urban residents and others for an overall total of 71,000 horses in 1986. The decrease from 71,000 in 1986 to 62,500 in 1986 is therefore 8,500 horses. These horses are accounted for as follows:

1.	Net loss per year from out of province sales in excess of out of province purchases	7,700
2.	Death losses @ 2,000/year	2,000
	Total Losses Per Year	9,700
3.	Births per year	7,000
	Total Net Loss Per Year	2,700

2,700 x 3 = 8,100 horse decrease over 3 years.

Note:

Many tables in this section present a frequency distribution of responses to assist the reader in evaluating the significance of the data. In a number of cases the figures in the frequency columns do not total exactly to other numbers in the tables. The small differences which exist are due to rounding of individual numbers.

3.2.1 Number of Owners and Horses

Table 1 includes 3,825 horses owned by 417 persons on Saskatchewan Indian Reserves. A breakdown of horse ownership categories and use types is presented in Table 2, where the horse ownership pattern on Indian Reserves is compared to the non-Indian Reserve area of Saskatchewan which was surveyed by Statistics Canada. There is a uniformity of horse use pattern as between Indian Reserves and the remainder of the province. In both cases horse owners said about one-third of their horses were used for a main horse business and two-thirds of their horses were kept for a combination of work and pleasure. The most significant difference is that over 13% of horses on Indian Reservations were kept for racing as compared to 4.5% for the remainder of the province. On the other hand, only 1.4% of horses on Indian Reservations were kept for purposes of pregnant mare's urine (PMU) production as compared to over 9% for the non-reserve portion of the province.

Indian Reserve statistics are included only in Tables 1, 2, 3, 4 and 5 of this report. While data were not collected for Indian reserves for the remainder of the statistical tables, the close correlation between the ownership and use of horses on Indian Reserves as compared to the rest of the province would suggest that it would have been reasonable to extrapolate beyond the data presented in Tables 6 to 30 to compensate for the omission of the Indian Reserve statistics.

Less than 700 Saskatchewan horse owners (5.7%) keep horses exclusively for a horse business (Table 3). However, this relatively small percentage of horse owners keeps 16.7% of the Saskatchewan horse population. Table 3 also reveals that about 86% of the province's horse owners use their horses (about 60% of the horses) for a combination of farm work and pleasure, while about 8% of the province's horsemen listed horses in both the horse business and the recreation and farm work categories.

TABLE 1 NUMBERS OF SASKATCHEWAN HORSES AND OWNERS

HORSES PER OWNER	NO. OF OWNERS	% OWNERS	TOTAL HORSE	% HORSES
1	2,715	22.8%	2,715	4.3%
2	2,672	22.5%	5,344	8.6%
3 - 5	3,692	31.0%	13,953	22.3%
6 - 10	1,780	15.0%	13,764	22.0%
11 - 20	701	5.9%	10,055	16.1%
21 - 40	206	1.7%	6,142	9.8%
OVER 40	126	1.1%	10,521	16.8%
TOTAL	11,894	100.0%	62,497	100.0%

* I.R. Statistics Included

One–third of the provinces horses are used for a "horse business" while two–thirds are used for recreation and/or farm work (Tables 4 and 5). The owners who keep horses for a main horse business (Table 4) average more horses per owner than those who keep horses for recreation and/or farm work (Table 5). For example, there were 824 owners of horses kept for a horse business (68%) who kept more than six or more horses per owner compared to 1,561 owners of horses kept for recreation and work (14%) who kept six or more horses. Of the "horse business" category, breeding and PMU production accounted for over half of the horses (5,900 and 5,600 respectively) while pleasure and recreation and working saddle horses accounted for the vast majority in the "recreation and farm work" category.

TABLE 2 NUMBER AND PERCENTAGE OF HORSES BY USE TYPE IN THE STATISTICS CANADA SURVEY AREA AND ON INDIAN RESERVES

	INDIAN RESERVES		STATS CAN. SURVEY		TOTAL PROVINCE	
HORSE BUSINESS	NUMBER	% I. R.	NUMBER	PERCENT	NUMBER	PERCENT
Breeding	435	11.4%	5,470	9.3%	5,905	9.5%
Racing	514	13.4%	2,658	4.5%	3,172	5.1%
Training & Resale	86	2.2%	4,089	7.0%	4,175	6.7%
Rodeo	161	4.2%	986	1.7%	1,147	1.8%
PMU	54	1.4%	5,552	9.5%	5,606	9.0%
Other			465	0.8%	465	0.7%
TOTAL BUSINESS	1,250	32.7%	19,220	32.8%	20,470	32.8%
WORK AND/OR RECREATION						
Pleasure/Rec.	1,187	31.0%	18,017	30.7%	19,204	30.7%
Working Saddle	897	23.5%	15,557	26.5%	16,454	26.3%
Draft	267	7.0%	2,859	4.9%	3,126	5.0%
Comp./Event	148	3.9%	1,859	3.2%	2,007	3.2%
Driving	76	2.0%	1,094	1.9%	1,170	1.9%
Other			27	0.0%	27	0.0%
TOTAL REC./WORK	2,575	67.3%	39,413	67.2%	41,988	67.2%
GRAND TOTAL	3,825	100.0%	58,633	100.0%	62,458	100.0%

Nearly half of the horses kept for racing (49.6%) are Thoroughbreds, 19.8% are Standardbred, 11.5% are Quarterhorses, 3% are Arabians and 16% are a combination of other breeds (Table 6). The large percentage of horses in the "Other" category is somewhat surprising. It is believed, however, that a large proportion of this group of horses is composed of ponies used for chuckwagon racing. The significance of chuckwagon and chariot racing is discussed in more detail under Table 28.

TABLE 3 HORSE OWNERSHIP BY CATEGORIES OF USE *

	OWNERS		HORSES	
CATEGORY OF USE	NUMBER	PERCENT	NUMBER	PERCENT
CATEGORY 1 HORSES USED FOR HORSE BUSINESS	673	5.66%	10,422	16.7%
CATEGORY 2 HORSES USED FOR REC. & FARM WORK	10,239	86.12%	36,702	58.8%
CATEGORIES 1&2 OWNERS WITH HORSES IN BOTH ABOVE CAT.	977	8.22%	15,336	24.6%

* I. R. STATISTICS INCLUDED

TABLE 4 HORSES USED FOR A SPECIFIC HORSE BUSINESS

TYPE OF BUSINESS	OWNERS NUMBER	OWNERS PERCENT	HORSES NUMBER	HORSES PERCENT	NUMBER OF HORSES PER OWNER 1-2	3-5	6-10	11-20	OVER 20
BREEDING	897	44.6%	5,905	28.8%	246	310	156	100	39
RACING	426	21.2%	3,172	15.5%	105	67	123	50	21
TRAINING & RESALE	371	18.4%	4,175	20.4%	91	93	83	69	44
RODEO	154	7.7%	1,147	5.6%	47	61	22	2	5
P.M.U.	133	6.6%	5,606	27.4%	15	17	13	6	74
OTHER	30	1.5%	465	2.3%	3	8	9	1	7
TOTAL		100.0%	20,472	100.0%					

* I.R. STATISTICS INCLUDED

TABLE 5 HORSES USED FOR RECREATION AND/OR FARM WORK

TYPE OF USE	OWNERS NUMBER	OWNERS PERCENT	HORSES NUMBER	HORSES PERCENT	NUMBER OF HORSES PER OWNER 1-2	3-5	6-10	11-20	OVER 20
PLEASURE/REC.	6,603	49.8%	19,204	45.7%	3955	2067	437	125	17
WORKING SADDLE	4,613	34.8%	16,454	39.2%	2342	1488	609	132	30
DRAFT	1,037	7.8%	3,126	7.4%	765	160	74	22	5
COMP. & EVENT	575	4.3%	2,007	4.8%	337	160	48	24	4
DRIVING	409	3.1%	1,170	2.8%	281	94	20	13	0
OTHER	15	0.1%	27	0.1%	13	1	1	0	0
TOTAL		100.0%	41,988	100.0%					

* INCLUDES I.R. STATISTICS

Figure 1 – Horses Used for Specific Horse Business

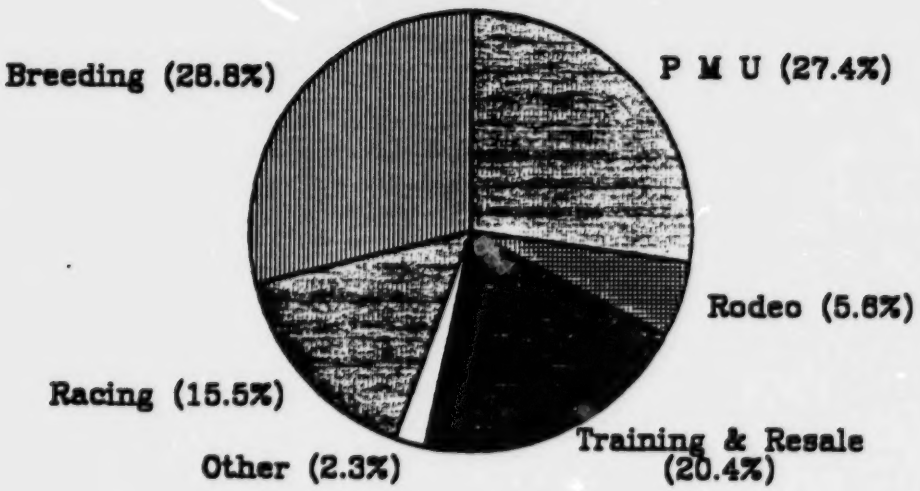


Figure 2 – Horses used for Recreation and/or Work

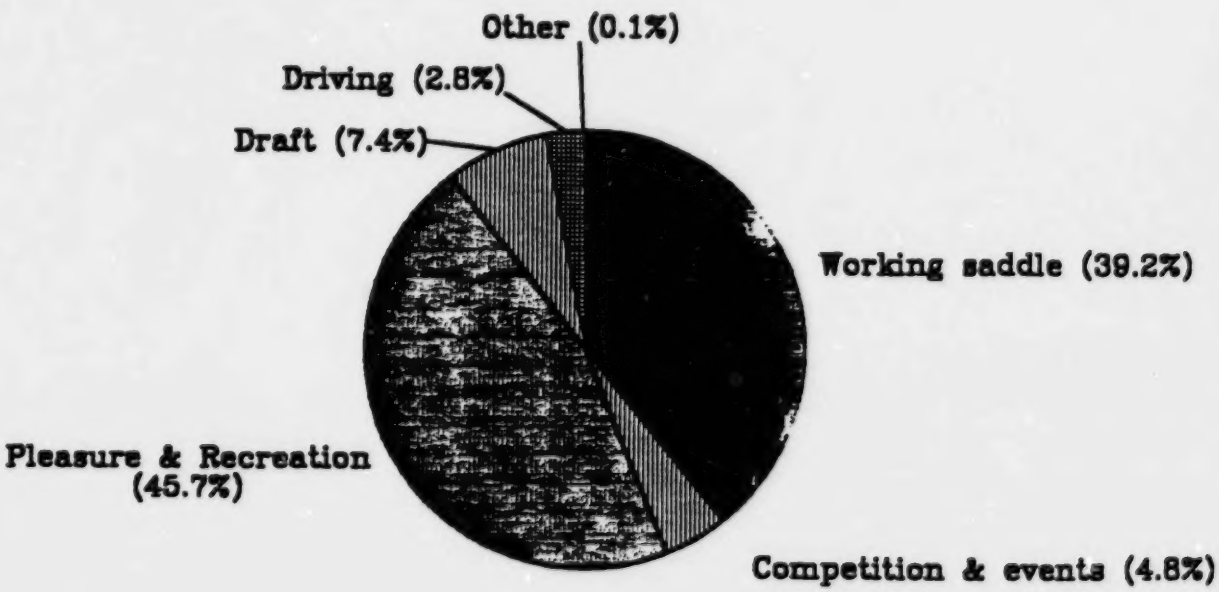


TABLE 6 HORSES USED FOR RACING

BREED OF HORSE	OWNERS NO.	OWNERS %	HORSES NO.	HORSES %	NUMBER OF HORSES PER OWNER 1–2	3–5	6–10	OVER 10
THBRED	183	47.2%	1316	49.5%	40	40	72	29
STBRED	83	21.4%	526	19.8%	27	22	20	12
OTRHORSE	52	13.4%	305	11.5%	23	5	15	8
ARABIAN	5	1.3%	79	3.0%	2	0	1	2
OTHER	65	16.8%	429	16.1%	25	4	27	7
TOTAL		100.0%	2657	100.0%				

TABLE 7 HORSES USED FOR RODEO

TYPE OF USE	OWNERS NO.	OWNERS %	HORSES NO.	HORSES %	HORSE PER OWNER 1–2	3–5	6–10	11–20	>20
WORKING	101	71.1%	350	35.9%	40	47	12	1	0
SADDLE BUCKING	26	18.3%	575	58.5%	3	6	10	1	5
OTHER	15	10.6%	58	5.9%	5	8	1	0	0

Table 7 compares the types of use of horses for rodeo purposes. Here, it can be noted, that five owners who keep horses for rodeo purposes own over 20 horses each. These horse owners are mainly contractors for rodeo stock. The working saddle horses used for rodeo would be largely pick up horses and general stock management horses since they are owned in relatively small numbers, with 40 owners out of 100 keeping one or two of these horses.

PMU owners average 30.5 horses per owner (Table 8). Approximately 65 owners have pregnant mares urine (PMU) production units and the remaining owners lease horses to those who operate stables for PMU production. Over 40% of the horses used for PMU production are draft and it is believed that a considerable proportion of the 22.8% listed as crossbreds and others will also be heavy horses.

In the classification of horses kept for training and resale, nearly 45% of the owners have Quarterhorses and account for 53.4% of the horses. Also, Quarterhorse owners keep larger numbers of horses per owner than is the case for other breeds represented in Table 9. The relatively small representation of other individual breeds indicates the overall dominance of the Quarterhorse group in Saskatchewan.

TABLE 8 HORSES USED FOR PMU

BREED TYPE	OWNERS		HORSES		HORSES PER OWNER				
	NO.	%	NO.	%	1-2	3-5	6-10	11-20	>20
DRAFT	60	33.1%	2272	41.1%	8	4	5	7	34
QTRHORSE	69	38.1%	1992	36.1%	6	10	14	8	28
CROSSBRDS & OTHERS	52	28.7%	1260	22.8%	5	13	10	9	13

TABLE 9 HORSES USED FOR TRAINING AND RESALE

BREED TYPE	OWNERS		HORSES		NUMBER OF HORSES PER OWNER				
	NO.	%	NO.	%	1-2	3-5	6-10	11-20	OVER 20
QTRHORSE	207	44.4%	2196	53.4%	66	41	40	43	25
ARABIAN	77	16.5%	371	9.0%	31	26	15	3	1
PONY & OTHER	70	15.0%	568	13.8%	26	25	6	5	6
THBRED	52	11.2%	447	10.9%	20	13	11	2	4
APPALOOSA	25	5.4%	162	3.9%	7	8	4	2	2
DRAFT	19	4.1%	251	6.1%	3	3	6	4	2
STBRED	16	3.4%	120	2.9%	6	5	0	3	1

When considering horse ownership for a combination of recreation and farm work (Table 10), it is noted, once again, that Quarterhorses strongly out-number all other breeds. Well over 50% of Saskatchewan's registered horses are composed of the Quarterhorse breed. Morgan and Miniature are the only two breeds of horses in Saskatchewan with more than 50% registered. The Arabian breed follows closely with nearly 50% of Arabian horses being registered and with Arabians representing nearly 11% of the horses used for a combination of work and recreation.

TABLE 10 HORSES USED FOR RECREATION AND/OR FARM WORK

	OWNERS		TOTAL HORSES		REGISTERED		GRADE	
BREED	NO.	%	NO.	%	NO.	% OF REG	NO.	% OF GRD
QTERHORSE	5,696	35.2%	16,836	42.7%	7,305	56.0%	9,530	36.2%
ARABIAN	1,962	12.1%	4,252	10.8%	2,042	15.6%	2,210	8.4%
APPALOOSA	1,192	7.4%	2,075	5.3%	988	7.6%	1,087	4.1%
PONY	1,029	6.4%	1,752	4.4%	112	0.9%	1,640	6.2%
THBRED	816	3.8%	1,284	3.3%	471	3.6%	813	3.1%
PERCHERON	563	3.5%	1,329	3.4%	166	1.3%	1,163	4.4%
BELGIAN	543	3.4%	1,537	3.9%	343	2.6%	1,194	4.5%
PAINT	360	2.2%	692	1.8%	243	1.9%	349	1.3%
MORGAN	300	1.9%	854	2.2%	490	3.8%	364	1.4%
STBRED	237	1.5%	513	1.3%	128	1.0%	385	1.5%
CLYDESDALE	147	0.9%	457	1.2%	221	1.7%	236	0.9%
MINIATURE	43	0.3%	168	0.4%	88	0.7%	80	0.3%
OTHER *	3,495	21.6%	7,745	19.7%	455	3.5%	7,290	27.7%

* MAINLY CROSSBREDS

Horses used for recreation and/or farm work account for about two-thirds of the total horse population in Saskatchewan (see Table 2). Data in Table 11 demonstrate a strong preponderance of ownership of one or two horses in the recreation and/or farm work category.

TABLE 11 HORSES USED FOR RECREATION AND/OR FARM WORK BY BREED

BREED	OWNERS		HORSES		NUMBER OF HORSES PER OWNER				
	NO.	%	NO.	%	1-2	3-5	6-10	11-20	OVER 20
QTERHORSE	5,696	35.3%	16,836	42.8%	3,435	1,569	524	148	16
ARABIAN	1,962	12.1%	4,254	10.8%	1,465	364	102	28	1
APPALOOSA	1,192	7.4%	2,076	5.3%	1,021	130	27	7	3
PONY	1,029	6.4%	1,752	4.5%	903	102	16	6	1
PERCHERON	531	3.3%	1,243	3.2%	427	70	25	6	2
THBRED	616	3.8%	1,286	3.3%	494	84	30	5	1
BELGIAN	543	3.4%	1,537	3.9%	391	104	33	12	1
PAINT	360	2.2%	593	1.5%	328	18	9	3	0
MORGAN	300	1.9%	855	2.2%	227	40	16	12	1
STBRED	237	1.5%	514	1.3%	175	56	0	5	0
CLYDE	147	0.9%	458	1.2%	118	21	3	1	3
MINIATURE	43	0.3%	169	0.4%	11	32	0	0	0
OTHER *	3,498	21.7%	7,757	19.7%	2,586	710	165	28	6

* MAINLY CROSSBREDS

Over 3,000 (28%) of Saskatcheawn horse owners keep one or more horses for breeding. Over 24,000 breeding mares and over 3,500 stallions are reported (Table 12). Approximately one-third of the brood mares are registered and only 41% of the stallions. Nearly 2,000 horse owners keep some registered brood mares and 200 of these keep six to ten mares while nearly 140 breeders have 11 or more registered mares (Table 13). However, referring back to Table 4, of the owners who consider themselves to be in the breeding business, only 295 have six or more mares.

TABLE 12 BREEDING MARES AND STALLIONS IN SASKATCHEWAN *

	REGISTRD	GRADE	TOTAL
MARES	7963	16295	24258
STALLIONS	1440	2103	3543

* THERE ARE 3,223 HORSE OWNERS (28%) IN SASKATCHEWAN WHO KEEP HORSES FOR BREEDING PURPOSES.

TABLE 13 NUMBER OF REGISTERED MARES AND STALLIONS

	NO.OF OWNERS	NO.OF HORSES	NUMBER OF HORSES PER OWNER				
			1-2	3-5	6-10	11-20	OVER 20
BREEDING MARES	1856	7963	1102	415	200	88	48
BREEDING STALLIONS	977	1441	876	82	15	2	0

TABLE 14 BREEDING MARES AND STALLIONS BY BREED AND NUMBER OF OWNERS

	OWNERS		HORSES		MARES		STALLIONS	
BREED	NO.	%	NO.	%	NO.	%	NO.	%
QTERHORSE	2,044	41.8%	10,545	39.9%	9,246	40.06%	1,299	38.8%
ARABIAN	627	12.8%	2,304	8.7%	1,902	8.24%	402	12.0%
THBRED	343	7.0%	1,540	5.8%	1,320	5.72%	220	6.6%
APPALOOSA	302	6.2%	1,467	5.6%	1,292	5.60%	175	5.2%
BELGIAN	231	4.7%	3,540	13.4%	3,245	14.06%	295	8.8%
PERCHERON	194	4.0%	1,971	7.5%	1,790	7.76%	181	5.4%
MORGAN	145	3.0%	476	1.8%	367	1.59%	109	3.3%
STBRED	139	2.8%	502	1.9%	413	1.79%	89	2.7%
PONY	133	2.7%	352	1.3%	310	1.34%	42	1.3%
PAINT	109	2.2%	443	1.7%	384	1.66%	59	1.8%
MINIATURE	88	1.8%	519	2.0%	380	1.65%	139	4.2%
CLYDESDALE	77	1.6%	625	2.4%	542	2.35%	83	2.5%
OTHER	456	9.3%	2,143	8.1%	1,887	8.18%	256	7.6%
	4888	100.0%	26,428	100.0%	23,078	100.00%	3,349	100.0%

*** Some owners keep more than one breed and are therefore listed more than once in this table. There are about 3,300 owners who keep breeding horses.**

Over 40% of Saskatchewan's breeding mares are of the Quarterhorse breed (Table 14). Belgians represent the second largest breed group with over 3,000 mares followed by Arabian, Percheron and Thoroughbred. A large number of horses in the "Other" category can be noted in Table 14. A number of crossbreds are believed to be included in this category.

TABLE 15 BREEDER'S FOALING PRACTICES

	OWNERS		FOALS*		BREEDER'S FOALING PRACTICES (AV. MONS. BETWEEN FOALS)					
					AV. 18 MONTHS		AV. 36 MONTHS		AV. 48 MONTHS	
MARES PER OWNER	NO. OF OWNERS	% OF OWNERS	NO. OF FOALS	% OF FOALS	NO. FOALS	% FOALS	NO. FOALS	% FOALS	NO. FOALS	% FOALS
1 - 5	1,822	80.1%	4,729	34.2%	1,476	65.1%	136	6.0%	209	9.2%
6 - 10	252	11.1%	2,135	15.5%	119	5.2%	57	2.5%	74	3.3%
11 - 15	72	3.2%	900	6.5%	32	1.4%	16	0.7%	24	1.1%
16 - 20	36	1.6%	749	5.4%	15	0.7%	9	0.4%	10	0.4%
21 - 25	10	0.4%	285	2.1%	4	0.2%	1	0.0%	5	0.2%
26 - 30	11	0.5%	350	2.5%	8	0.4%	2	0.1%	0	0.0%
OVER 30	71	3.1%	4,662	33.8%	40	1.8%	11	0.5%	20	0.9%
TOTAL	2,274	100.0%	13,810	100.0%	1,694	74.7%	232	10.2%	342	15.1%

* FOALS OVER A TWO YEAR PERIOD.

Horse owners were asked for information on the number of foals they bred and raised and the average frequency of foaling on a per mare basis. Nearly 14,000 foals were bred and raised, during the two years preceding the survey, by slightly under 2,300 breeders (Table 15) Nearly 75% of the mares have a foal once every 18 months. The figure of nearly 14,000 foals during the past two years (average of 7,000 foals per year) will be discussed later in the report where purchases and sales of Saskatchewan horses are reported.

Table 16 presents information on horse owners who considered themselves to be in the horse breeding business but who did not indicate that they owned horses for racing. In this table the preponderance of Belgian, Percheron and Clydesdale can be noted. It is believed that the large number of mares per owner in these breed classifications indicates that several of the heavy horse breeders are also in the PMU business.

TABLE 16 BREEDING HORSES REPORTED BY OWNERS WHO SAID THEY ARE IN THE BREEDING BUSINESS BUT NOT IN THE RACING BUSINESS

		MARES		STALLIONS	
BREED	NO.OWNER	NUMBER	AV./OWNER	NUMBER	AV./OWNER
QUARTERHORSE	555	4,891	8.81	577	1.04
ARABIAN	192	883	4.60	238	1.24
APPALOOSA	103	526	5.11	92	0.89
BELGIAN	74	2,268	30.65	156	2.11
PERCHERON	73	1,527	20.92	138	1.89
THOROUGHBRED	67	297	4.43	41	0.61
MORGAN	60	181	3.02	59	0.98
PAINT	43	266	6.19	39	0.91
CLYDESDALE	35	355	10.14	55	1.57
MINIATURE	24	206	8.58	77	3.21
STANDARDBRED	9	34	3.78	1	0.11
PONY	8	47	5.88	13	1.63
OTHER	71	731	10.30	74	1.04
TOTAL	1,314	12,194	9.28	1560	1.19

Horse breeders were then sorted by listing those who said they were in the racing business but did not keep horses specifically for breeding. The preponderance of Quarterhorses and the "Other" classification in this table, would suggest that over 300 of these mares are used in the racing business and are bred occasionally. In addition to flat racing, a considerable number of horses are used for chuckwagon, barrel and chariot racing.

TABLE 17 BREEDING HORSES REPORTED BY OWNERS WHO SAID THEY ARE IN THE RACING BUSINESS BUT NOT THE BREEDING BUSINESS

		MARES		STALLIONS	
BREED	NO.OWNERS	NUMBER	AV./OWNER	NUMBER	AV./OWNER
QUARTERHORSE	45	257	5.71	39	0.87
THOROUGHBRED	38	170	4.47	31	0.82
STANDARDBRED	25	68	2.72	14	0.56
ARABIAN	3	8	2.67	3	1.00
OTHER	39	55	1.41	7	0.18
TOTAL	150	558	3.72	94	0.63

Horse owners were asked to indicate their participation in various events held throughout the province each year. Participation by horsemen in fairs, parades and trail rides predominated while breed events constituted slightly over 11% of the total (Table 18). During the year preceding the survey, Saskatchewan horse owners made 21,500 event entries with 11,500 horses.

TABLE 18 NUMBER OF OWNERS WHO ENTER VARIOUS HORSE EVENTS ON AN ANNUAL BASIS

TYPE OF EVENT	OWNERS		HORSES		EVENT ENTRIES	
	NUMBER	%	NUMBER	%	NUMBER	%
EVENTS IN PROV.						
FAIRS	1,239	25.7%	2,961	25.7%	6,985	32.5%
PARADES	1,133	23.5%	2,690	23.4%	2,282	10.6%
TRAIL RIDES	1,057	21.9%	2,706	23.5%	3,439	16.0%
BREED EVENTS	597	12.4%	1,227	10.7%	2,407	11.2%
OTHER EVENTS	374	7.8%	831	7.2%	4,569	21.3%
EVENTS OUTSIDE PROV						
FAIRS	149	3.1%	506	4.4%	882	4.1%
BREED EVENTS	107	2.2%	217	1.9%	376	1.8%
TRAIL RIDES	62	1.3%	134	1.2%	173	0.8%
PARADES	59	1.2%	133	1.2%	181	0.8%
OTHER EVENTS	43	0.9%	104	0.9%	172	0.8%
TOTAL	4,820	100.0%	11,509	100.0%	21,466	100.0%

Parades are annually entered by over 1,200 horse owners with nearly 2,500 parade entries and showing nearly 3,000 horses (Table 19). The vast majority of parades entered were held in Saskatchewan with only 181 parade entries out of province. A concentration of entry into one or two parades per year per owner can be noted with the highest frequency of horse entries being one and two horses per owner as well.

Figure 3 – Horses Event Entries in Saskatchewan

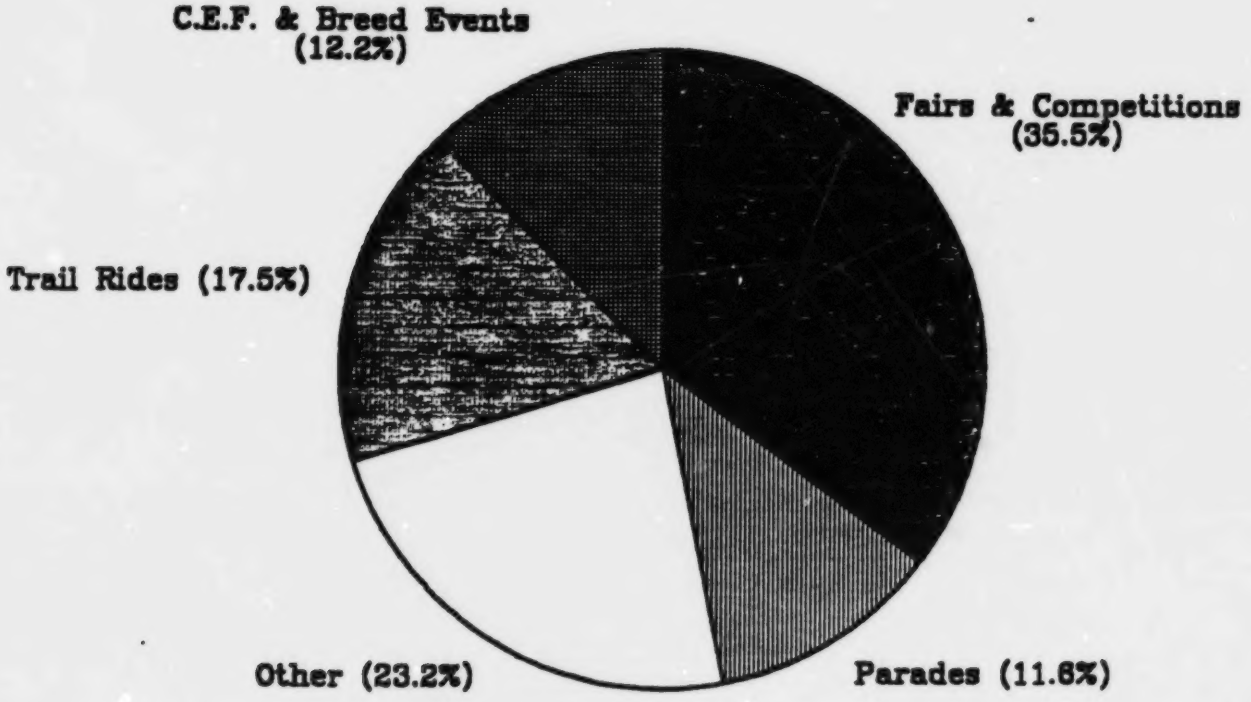


TABLE 19 NUMBER OF HORSE OWNERS WHO ENTER HORSES IN PARADES ON A YEARLY BASIS

	OWNERS		EVENT ENTRIES		HORSES		NUMBER OF HORSES ENTERED							
PARADES/YR	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	1	2	3	4	5	6	7	>7
INSIDE SASK.														
1	631	52.5%	631	25.4%	1,258	44.1%	266	204	70	83	4	1	0	1
2	314	26.1%	629	25.3%	854	29.9%	78	94	51	69	7	16	3	3
3	90	7.5%	272	10.9%	319	11.2%	11	41	8	10	1	6	0	10
4	43	3.6%	173	7.0%	118	4.1%	1	24	8	3	4	1	0	0
5	16	1.3%	84	3.4%	19	0.7%	15	0	1	0	0	0	0	0
6	16	1.3%	99	4.0%	39	1.4%	0	11	4	1	0	3	0	0
OVER 6	36	3.0%	419	16.9%	113	4.0%	0	11	13	7	3	0	0	0
TOTAL IN SASK	1,146	95.3%	2,307	92.6%	2,720	95.4%								
OUTSIDE SASK											OVER 4			
1	39	3.2%	39	1.6%	78	2.7%	20	7	6	5	0			
2	11	0.9%	23	0.9%	41	1.4%	3	3	0	3	2			
OVER 10	7	0.6%	117	4.7%	15	0.5%	0	7	0	0	0			
TOTAL	57	4.7%	179	7.2%	132	4.6%								
GRAND TOTAL	1,203	100.0%	2,486	100.0%	2,852	100.0%								

Considering entry into competition at fairs and other events, nearly 1,400 owners participated in this activity, making about 8,000 event entries with 3,500 horses. Over 25% of horse owners enter only one event at an exhibition or fair with one or two horses being the most frequent number entered (Table 20). In contrast with the large number of horse owners who limited entries to one or two events at exhibitions and fairs, 185 owners (13.3%) entered over 10 competitions at fairs inside Saskatchewan and 31 (2.2%) entered over 10 in other provinces. These owners are likely travelling the fair circuit with their horses. It should also be noted that some of these event entries may include chuckwagon and chariot races.

TABLE 20 NUMBER OF TIMES HORSE OWNERS ENTER HORSES IN COMPETITIONS AT FAIRS AND EXHIBITIONS ON A YEARLY BASIS

NUMBER OF EVENTS/YR	OWNERS		EVENT ENTRIES		HORSES		NUMBER OF HORSES ENTERED PER EVENT								
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	1	2	3	4	5	6	7	8	>8
INSIDE SASK.															
1	364	26.2%	364	4.6%	679	19.6%	170	136	19	25	0	7	1	2	0
2	187	13.5%	374	4.7%	407	11.7%	70	74	12	15	7	1	3	1	1
3	96	6.9%	288	3.6%	269	7.8%	39	9	22	16	0	2	0	3	3
4	120	8.6%	480	6.1%	296	8.5%	52	15	20	21	1	4	1	3	0
5	76	5.5%	383	4.8%	180	5.2%	43	3	10	12	1	3	0	3	0
6	58	4.2%	352	4.4%	173	5.0%	4	18	23	6	1	3	0	0	1
7	44	3.2%	312	3.9%	132	3.8%	0	15	24	1	0	0	3	0	0
8	64	4.6%	513	6.5%	162	4.7%	30	5	11	3	8	3	1	0	0
9	23	1.7%	210	2.7%	87	2.5%	7	0	7	3	0	0	0	0	4
10	27	1.9%	276	3.5%	97	2.8%	0	7	5	10	1	3	0	0	0
OVER 10	185	13.3%	3,490	44.1%	484	14.0%	59	69	30	13	2	0	7	0	3
TOTAL IN SASK	1,244	89.6%	7,042	88.9%	2,966	85.5%									
OUTSIDE SASK														OVER 6	
1	41	3.0%	41	0.5%	114	3.3%	3	16	13	5	3	0	0		
2	34	2.4%	68	0.9%	170	4.9%	1	17	3	4	0	3	4		
3	9	0.6%	29	0.4%	48	1.4%	1	1	2	0	1	3	1		
4	14	1.0%	57	0.7%	37	1.1%	11	0	0	0	0	0	3		
5	7	0.5%	39	0.5%	15	0.4%	0	7	0	0	0	0	0		
6	2	0.1%	13	0.2%	3	0.1%	1	1	0	0	0	0	0		
7	7	0.5%	54	0.7%	15	0.4%	0	7	0	0	0	0	0		
OVER 10	31	2.2%	577	7.3%	100	2.9%	0	8	18	0	0	0	3		
TOTAL	145	10.4%	878	11.1%	502	14.5%									
GRAND TOTAL	1,389	100.0%	7,920	100.0%	3,468	100.0%									

Breed events were the fourth most popular type of event for horsemen. In this case, over 700 owners made 2,796 event entries with 1,445 horses (Table 21). Most horse owners entered from one to six events with one or two horses.

Trail rides are very popular in Saskatchewan with these events ranking third in popularity among horse owners. Over 1,100 owners entered over 3,600 trail rides with 30 of these owners entering over 10 trail rides per year (Table 22). In the case of owners entering over 10 trail rides, the average was 62 per owner indicating that horse owners were reporting casual (unorganized) trail rides in their response to this question. Many of these trail rides were probably taken with a few friends near the owner's headquarters.

About 20% of event entries were in the "other" category (Table 23). Horse owner responses, in this case, likely included a considerable number of local and semi organized events such as local team roping competitions, barrel racing, etc.

External or hired services were utilized one or more times by 5,370 (45%) horse owners (Table 24). The converse of this statistic indicates about 7,000 owners do not use external services. It should be noted, however, that the use of external services for horses on the race circuit for one or more weeks has been excluded from Table 24. These exclusions relate to 443 racehorses on the race circuit for a total of 2,805 weeks. An average cost has been placed on veterinary, farrier, feed and other services for the 2,805 weeks mentioned above and this amount is included in the annual expense assessment in Chapter 4 of this report.

TABLE 21 NUMBER OF TIMES HORSE OWNERS ENTER HORSES IN BREED EVENTS OR CEF EVENTS ON A YEARLY BASIS

NUMBER OF EVENTS/YR	OWNERS		EVENT ENTRIES		HORSES		NUMBER OF HORSES ENTERED PER EVENT							
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	1	2	3	4	5	6	7	>7
INSIDE SASK.														
1	122	17.3%	122	4.4%	224	15.5%	81	16	9	3	0	11	0	0
2	97	13.7%	195	7.0%	178	12.3%	61	20	4	3	4	1	3	0
3	99	14.0%	299	10.7%	230	15.9%	26	45	13	8	2	0	0	3
4	60	8.5%	243	8.7%	135	9.3%	24	22	0	9	2	1	0	1
5	72	10.2%	361	12.9%	138	9.6%	32	26	4	5	2	1	0	0
6	56	7.9%	339	12.1%	119	8.2%	24	9	19	1	0	1	1	0
7	54	7.6%	382	13.7%	109	7.5%	23	15	7	7	0	0	0	0
8	12	1.7%	96	3.4%	45	3.1%	1	4	0	0	3	3	0	0
9	13	1.8%	119	4.3%	23	1.6%	7	3	1	0	1	0	0	0
10	1	0.1%	11	0.4%	5	0.3%	0	0	0	0	1	0	0	0
OVER 10	15	2.1%	254	9.1%	25	1.7%	7	6	0	1	0	0	0	0
TOTAL IN SASK	601	85.0%	2421	86.6%	1,231	85.2%								
OUTSIDE SASK											OVER 5			
1	44	6.2%	44	1.6%	100	6.9%	8	20	12	1	2	0		
2	17	2.4%	35	1.3%	29	2.0%	13	1	2	0	0	1		
3	10	1.4%	30	1.1%	13	0.9%	7	1	1	0	0	0		
4	10	1.4%	40	1.4%	21	1.5%	7	0	0	0	1	1		
5	16	2.3%	83	3.0%	17	1.2%	15	1	0	0	0	0		
OVER 5	9	1.3%	143	5.1%	34	2.4%	0	3	0	5	0	1		
TOTAL	106	15.0%	375	13.4%	214	14.8%								
GRAND TOTAL	707	100.0%	2796	100.0%	1,445	100.0%								

TABLE 22 NUMBER OF TIMES HORSE OWNERS ENTER HORSES IN TRAIL RIDES ON A YEARLY BASIS

TRAIL RIDES PER YEAR	OWNERS		EVENT ENTRIES		HORSES		NUMBER OF HORSES ENTERED PER EVENT							
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	1	2	3	4	5	6	7	>7
INSIDE SASK.														
1	531	47.5%	531	14.7%	1,205	42.4%	166	175	111	55	13	5	1	1
2	294	26.3%	588	16.3%	783	27.6%	70	94	39	60	23	3	0	3
3	105	9.4%	316	8.8%	310	10.9%	27	16	34	20	3	0	0	3
4	48	4.3%	194	5.4%	130	4.6%	15	8	12	5	3	0	3	0
5	12	1.1%	61	1.7%	32	1.1%	0	7	1	3	0	0	0	0
6	29	2.6%	174	4.8%	82	2.9%	7	7	0	8	3	1	0	0
7	4	0.4%	30	0.8%	7	0.2%	1	3	0	0	0	0	0	0
8	3	0.3%	26	0.7%	19	0.7%	0	0	0	0	0	3	0	0
10	8	0.7%	89	2.5%	28	1.0%	0	0	7	1	0	0	0	0
OVER 10	23	2.1%	1,429	39.6%	112	3.9%	0	12	1	2	1	3	0	3
TOTAL IN SASK	1,057	94.6%	3,438	95.3%	2,708	95.3%								
OUTSIDE SASK											OVER 5			
1	45	4.0%	45	1.2%	97	3.4%	26	7	0	4	4	2		
2	8	0.7%	17	0.5%	21	0.7%	0	7	0	0	1	0		
OVER 10	7	0.6%	109	3.0%	15	0.5%	0	7	0	0	0	0		
TOTAL OUT OF SASKATCHEWAN	60	5.4%	171	4.7%	133	4.7%								
GRAND TOTAL	1,117	100.0%	3,609	100.0%	2,841	100.0%								

TABLE 23 NUMBER OF TIMES HORSE OWNERS ENTER HORSES IN OTHER EVENTS ON A YEARLY BASIS

NUMBER OF OTHER EVENTS PER YEAR	OWNERS		EVENTS ENTRIES		HORSES		NUMBER OF HORSES ENTERED PER EVENT							
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	1	2	3	4	5	6	7	>7
INSIDE SASK.														
1	95	22.2%	95	2.0%	163	17.1%	47	35	7	0	4	0	0	0
2	42	9.8%	84	1.8%	64	6.7%	25	12	3	1	0	0	0	0
3	41	9.6%	124	2.6%	42	4.4%	40	1	0	0	0	0	0	0
4	18	4.2%	75	1.6%	43	4.5%	0	14	3	1	0	0	0	0
5	25	5.8%	128	2.7%	44	4.6%	7	16	1	0	0	0	0	0
6	13	3.0%	80	1.7%	44	4.6%	0	0	8	4	0	0	0	0
7	7	1.6%	54	1.1%	15	1.6%	0	7	0	0	0	0	0	0
8	17	4.0%	143	3.0%	38	4.0%	0	16	0	1	0	0	0	0
10	1	0.2%	11	0.2%	38	4.0%	0	0	0	0	0	0	0	1
OVER 10	128	29.9%	3,806	79.7%	362	37.9%	55	32	26	8	1	0	0	3
TOTAL IN SASK	387	90.4%	4,600	96.3%	853	89.2%								
OUTSIDE SASK											OVER 4			
1	17	4.0%	17	0.4%	21	2.2%	16	0	0	1	0			
2	3	0.7%	6	0.1%	3	0.3%	3	0	0	0	0			
3	7	1.6%	23	0.5%	31	3.2%	0	0	0	7	0			
4	3	0.7%	13	0.3%	9	0.9%	0	0	3	0	0			
5	2	0.5%	11	0.2%	12	1.3%	0	0	1	0	1			
6	1	0.2%	6	0.1%	1	0.1%	1	0	0	0	0			
10	7	1.6%	78	1.6%	23	2.4%	0	0	7	0	0			
OVER 10	1	0.2%	22	0.5%	3	0.3%	0	0	1	0	0			
TOTAL OUT OF SASKATCHEWAN	41	9.6%	176	3.7%	103	10.8%								
GRAND TOTAL	428	100.0%	4,776	100.0%	956	100.0%								

Veterinarians were used nearly 13,000 times by horsemen excluding the use of veterinarians attending horses on the race circuit (Table 24). Farrier services were used at about the same level as veterinary services while horse trainer services were used over 30,000 times and hired use of horse facilities was at a similar frequency. In the latter two cases, the relatively small number of horse owners (790 and 507 respectively) using this large amount of trainer and facility service would suggest quite a large number of single day usage repeated on several occasions. Substantial use of Western and English riding instructors is also indicated with 546 owners taking western and 417 owners taking English riding instruction 7,309 and 9,972 times respectively.

The most significant figure on the use of a hired horse trainer in Table 25 is in the "over 10" weeks of training category. Here, 278 owners utilized 13,348 training weeks.

Six hundred and sixty-one owners hired 10,505 weeks of horse training at some else's facility (Table 26). Two hundred and fifty-two of these owners (38%) accounted for over 83% of the training weeks with over ten weeks of training being purchased per owner.

Four hundred and thirty-one owners boarded 1,840 horses for the 12 months preceding the survey, 217 owners boarded 433 horses October to March inclusive and 318 owners boarded 550 horses April to September inclusive (Table 27). Those who boarded horses for the full twelve months are believed to be urban owners with no access to pasture while whose who boarded horses October to March most likely have pasture for summer care but no winter shelter and feeding facilities.

TABLE 24 USE OF EXTERNAL SERVICES BY HORSE OWNERS

TYPE OF SERVICE	OWNERS *		TOTAL TIMES SERVICES USED		FREQUENCY OF USE OF EXTERNAL SERVICES										
	NUMBER	%	NUMBER	%	1	2	3	4	5	6	7	8	9	10	>10
VETERINARIAN	3,818	35.9%	12,907	11.4%	1570	880	377	255	113	260	26	28	7	67	229
FARRIER	2,730	25.6%	12,362	10.9%	581	573	303	339	170	341	22	112	121	20	163
FEED/FORAGE SUPPLY	1,372	12.9%	9,578	8.5%	666	225	116	46	14	64	11	26	2	22	176
HORSE TRAINER	790	7.4%	30,041	26.6%	282	89	3	8	11	11	24	1	1	0	357
WESTRN RDING INST.	548	5.1%	7,309	6.5%	130	100	49	49	15	19	8	6	7	16	141
HORSE FACILITIES **	507	4.8%	28,328	25.0%	97	42	23	10	10	46	23	4	0	17	230
ENGLISH RIDING INST	417	3.9%	9,972	8.8%	66	31	50	32	7	10	12	3	0	7	166
HORSE TRANSPORT	384	3.6%	2,348	2.1%	107	77	18	31	14	39	4	27	0	11	53
DRIVING INSTRUCT.	78	0.7%	175	0.2%	40	18	1	0	7	7	1	0	0	0	0
OTHER EXT SERVICES	8	0.1%	123	0.1%	2	1	0	1	0	0	0	0	0	0	4
TOTAL		100.0%	113,139	100.0%											

* 5,370 HORSE OWNERS USED SERVICES ONE OR MORE TIMES. THE TOTAL ON THE COLUMN IS HIGHER BECAUSE MOST OWNERS RESPONDED IN MORE THAN ONE CATEGORY.
** RIDING ARENA, RING OR TRACK.

TABLE 25 HORSES TRAINED BY A HIRED TRAINER

WEEKS OF TRAINING PER YEAR	OWNERS		WEEKS OF TRAINING		HORSES		NUMBER HORSES TRAINED / WEEK						
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	1	2	3	4	5	6	>6
1	42	4.8%	42	0.3%	42	2.9%	42	0	0	0	0	0	0
2	35	4.0%	71	0.4%	55	3.8%	30	4	0	0	0	0	1
3	30	3.5%	92	0.6%	43	3.0%	26	0	3	0	0	1	0
4	179	20.7%	718	4.3%	189	13.2%	169	10	0	0	0	0	0
5	22	2.5%	111	0.7%	22	1.5%	22	0	0	0	0	0	0
6	84	9.7%	505	3.1%	99	6.9%	69	13	1	0	0	0	0
7	16	1.8%	115	0.7%	24	1.7%	8	7	0	0	0	0	0
8	139	16.1%	1,118	6.8%	196	13.7%	90	41	7	0	0	0	0
9	12	1.4%	109	0.7%	14	1.0%	11	0	1	0	0	0	0
10	29	3.3%	290	1.8%	36	2.5%	21	7	0	0	0	0	0
OVER 10	278	32.1%	13,348 *	80.8%	711	49.5%	120	79	27	13	9	13	14
TOTAL	866	100.0%	16,519	100.0%	1,435	100.0%							

* BELIEVED TO INCLUDE A LARGE NUMBER OF RACE HORSES.

TABLE 26 HORSES TRAINED AT SOMEONE ELSE'S FACILITY DURING THE PERIOD OCTOBER 1988 TO SEPTEMBER 1989

TRAINING WEEKS	OWNERS		WEEKS OF TRAINING	
	NUMBER	PERCENT	NUMBER	PERCENT
1	119	18.0%	119	1.1%
2	71	10.7%	142	1.4%
3	23	3.5%	70	0.7%
4	28	4.2%	114	1.1%
5	31	4.7%	156	1.5%
6	31	4.7%	187	1.8%
7	1	0.2%	7	0.1%
8	53	8.0%	427	4.1%
9	7	1.1%	70	0.7%
10	45	6.8%	457	4.4%
OVER 10	252	38.1%	8,756	83.4%
TOTAL	661	100.0%	10,505	100.0%

TABLE 27 HORSES BOARDED BY OTHERS DURING THE PERIOD OCTOBER 1988 TO SEPTEMBER 1989

HORSES BOARDED	FULL 12 MONTHS		OCT. TO MARCH		APR. TO SEPT.	
	NUMBER OWNERS	TOTAL HORSES	NUMBER OWNERS	TOTAL HORSES	NUMBER OWNERS	TOTAL HORSES
1	0	0	133	133	209	209
2	215	431	56	112	66	132
3	47	143	7	22	32	96
4	85	340	8	35	3	12
5	16	82	1	5	8	101 *
6	37	227	6	39		
7	2	15	0	0		
8	12	96	1	8		
9	1	9	0	0		
10	7	78	2	22		
OVER 10	9	419	3	57		
TOTAL	431	1840	217	433	318	550

* CONFIDENTIALITY RESTRICTIONS DO NOT PERMIT A FURTHER BREACKDOWN FOR APRIL TO SEPTEMBER.

Approximately 554 race entries are made with 2,259 horses on an annual basis (Table 28). Chuckwagon and chariot racing appears to be a major component with 163 entries involving 863 horses. These events take place in a large number of Saskatchewan communities in contrast with Thoroughbred and Standardbred racing which occur mainly in Saskatoon and Regina.

TABLE 28 ENTRIES IN RACE MEETS

TYPE OF RACE MEETS	OWNERS		HORSES ENTERED	
	NUMBER	PERCENT	NUMBER	PERCENT
IN PROVINCE				
THOROUGHBRED	121	21.8%	401	17.8%
CHUCKWAGON	100	18.1%	660	29.2%
STANDARDBRED	67	12.1%	218	9.7%
CHARIOT	63	11.4%	203	9.0%
QUARTERHORSE	37	6.7%	138	6.1%
OUT OF PROV.				
THOROUGHBRED	58	10.5%	166	7.3%
CHUCKWAGON	37	6.7%	292	12.9%
STANDARDBRED	36	6.5%	90	4.0%
QUARTERHORSE	18	3.2%	48	2.1%
CHARIOT	17	3.1%	43	1.9%
TOTAL	554	100.0%	2259	100.0%

Horse sales were made by 3,074 owners between October 1988 and September 1989. These owners sold 20,438 horses and predicted that 11,445 (56%) were going for feedlot or slaughter (Table 29). Horses for pleasure and/or recreation made up nearly 13% of sales, followed by working saddle horses at over 8% of sales. Out of province sales stood at 9,413 for the past year compared to purchases from other provinces of 1,776 horses (Table 30). There was therefore a net outflow of over 7,000 horses during 1988–89.

TABLE 29 HORSE SALES DURING THE PERIOD OCTOBER 1988 TO SEPTEMBER 1989

	OWNERS		HORSES SOLD		SOLD IN PROVINCE		SOLD OUT OF PROV.	
TYPE OF USE	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	% TOTAL	NUMBER	% TOTAL
PLEASURE/REC.	1097	35.7%	2,629	12.9%	2,337	11.4%	292	1.4%
FEEDLOT/SLAUGHTER	717	23.3%	11,445	56.0%	3,221	15.8%	8,224	40.2%
WORKING SADDLE	601	19.6%	1,736	8.5%	1,516	7.4%	220	1.1%
BREEDING	239	7.8%	725	3.5%	491	2.4%	234	1.1%
RACING	182	5.9%	616	3.0%	491	2.4%	125	0.6%
DRAFT	155	5.0%	447	2.2%	429	2.1%	18	0.1%
COMP/EVENT	147	4.8%	348	1.7%	249	1.2%	97	0.5%
RODEO	86	2.8%	241	1.2%	187	0.9%	54	0.3%
DRIVING	73	2.4%	162	0.8%	156	0.8%	6	0.0%
PMU	50	1.6%	192	0.9%	145	0.7%	47	0.2%
OTHER	361	11.7%	1,899	9.3%	1,803	8.8%	96	0.5%
TOTAL	3074	100.0%	20,439	100.0%	11,025	53.9%	9,413	46.1%

TABLE 29A HORSES SOLD BY PERSONS KEEPING HORSES FOR BUSINESS PURPOSES

	OWNERS		HORSES SOLD		SOLD IN PROVINCE		SOLD OUT OF PROV.	
TYPE OF USE	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	% TOTAL	NUMBER	% TOTAL
PLEASURE/REC.	285	23.5%	1017	6.7%	885	14.0%	132	1.5%
FEEDLOT/SLAUGHTER	211	17.4%	10259	67.7%	2137	33.8%	8122	92.1%
WORKING SADDLE	133	11.0%	776	5.1%	653	10.3%	123	1.4%
BREEDING	152	12.5%	565	3.7%	421	6.7%	144	1.6%
RACING	150	12.4%	564	3.7%	439	6.9%	125	1.4%
DRAFT	35	2.9%	163	1.1%	157	2.5%	6	0.1%
COMP/EVENT	69	5.7%	250	1.7%	168	2.7%	82	0.9%
RODEO	34	2.8%	87	0.6%	47	0.7%	40	0.5%
DRIVING	28	2.3%	71	0.5%	71	1.1%	0	0.0%
PMU	17	1.4%	105	0.7%	93	1.5%	12	0.1%
OTHER	100	8.2%	1289	8.5%	1258	19.9%	31	0.4%
TOTAL	1214	100.0%	15146	100.0%	6329	100.0%	8817	100.0%

TABLE 30 HORSES BOUGHT OCTOBER 1988 TO SEPTEMBER 1989

TYPE OF USE	BUYERS		TOTAL BOUGHT		SASK. PURCHASES		OTHER PROVINCE		AVERAGE TOTAL
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	% TOTAL	NUMBER	% TOTAL	PER OWNER
PLEASURE & REC.	846	33.5%	1,180	8.5%	1046	7.6%	134	1.0%	1.39
WORKING SADDLE	794	31.4%	1,500	10.8%	1427	10.3%	73	0.5%	1.89
BREEDING	267	10.6%	640	4.6%	474	3.4%	166	1.2%	2.40
COMPETITION/EVENT	161	6.4%	235	1.7%	192	1.4%	43	0.3%	1.46
RACING	121	4.8%	283	2.0%	202	1.5%	81	0.6%	2.34
DRAFT	116	4.6%	322	2.3%	305	2.2%	17	0.1%	2.78
DRIVING	86	3.4%	173	1.2%	173	1.2%	0	0.0%	2.01
PMU	46	1.8%	404	2.9%	386	2.8%	18	0.1%	8.78
FEEDLOT/SLAUGHTER	45	1.8%	8,941	64.6%	7743	55.9%	1198	8.6%	198.69
RODEO	35	1.4%	64	0.5%	42	0.3%	22	0.2%	1.83
OTHER	12	0.5%	109	0.8%	89	0.6%	20	0.1%	9.08
TOTAL	2,529	100.0%	13,851	100.0%	12079	87.2%	1778	12.8%	5.48

TABLE 30A HORSES BOUGHT BY PERSONS KEEPING HORSES FOR BUSINESS PURPOSES

TYPE OF USE	BUYERS		TOTAL BOUGHT		SASK. PURCHASES		OTHER PROVINCE	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	% TOTAL	NUMBER	% TOTAL
PLEASURE & REC.	69	10.5%	123	1.2%	120	1.3%	3	0.2%
WORKING SADDLE	76	11.5%	332	3.1%	329	3.6%	3	0.2%
BREEDING	202	30.6%	552	5.2%	413	4.6%	139	9.2%
COMPETITION/EVENT	49	7.4%	85	0.8%	66	0.7%	19	1.3%
RACING	115	17.4%	267	2.5%	185	2.0%	82	5.4%
DRAFT	23	3.5%	39	0.4%	37	0.4%	2	0.1%
DRIVING	8	1.2%	31	0.3%	31	0.3%	0	0.0%
PMU	46	7.0%	404	3.8%	385	4.2%	19	1.3%
FEEDLOT/SLAUGHTER	29	4.4%	8580	81.1%	7382	81.4%	1198	79.4%
RODEO	33	5.0%	58	0.5%	36	0.4%	22	1.5%
OTHER	10	1.5%	107	1.0%	86	0.9%	21	1.4%
TOTAL	660	100.0%	10578	100.0%	9070	100.0%	1508	100.0%

Horses for feedlot and/or slaughter represent the largest single item in Tables 29 and 30 with total sales of 11,445 and purchases of 8,941. The second largest sales and purchases volume was comprised of horses for use as pleasure and/or recreation with 1,180 purchases and 2,629 sales. Sales and purchases outside Saskatchewan were relatively insignificant with exception of horses for feedlot and/or slaughter.

Sales and purchases made by persons operating a horse business were segregated from total sales and purchase to determine the influence of the "Horse Business" group on marketings. These data are presented in **Tables 29A** and **30A**, respectively. Here, it is noted that about 75% of total transactions in both sales and purchases are made by "Horse Business" owners. In the case of out of province transactions, the "Horse Business" owners accounted for 93% of sales and 85% of purchases. In both cases, over 80% of the trade was in horses for feedlot and slaughter. Breeding horses made up the second largest percentage of out-of-province purchases at 9.2%, but only 1.6% of out-of-province sales.

When sales and purchases for all purposes except feedlot and slaughter are considered, the "Horse Business" owners accounted for 54% and 40% of the total respectively.

3.3 SUMMARY AND CONCLUSIONS

In 1989 there were 62,500 horses in Saskatchewan owned by 12,000 persons. About 1,500 horse owners are urban residents with the remaining 10,500 owners categorized as farmers.

Statistical findings are considered reliable on the basis of a reconciliation with the 1986 farm census report on horses. The 1986 census reported 67,000 horses. Based on the findings of this study 3,000 horses were added to this number to account for urban and other horses not included in the 1986 census for a total figure of 71,000. The annual net deficit between out of province purchases and out of province sales (7,637 per year x 3 years) was then subtracted along with death losses (2,000 per year x 3 years). Births (7,000 per year x 3 years) were added and the final calculation was 71,000 – 7,911 = 63,089. By this method the 1986 census of 67,000 horses can be reconciled with the count of 62,500 developed for this study.

Response to the telephone survey by horse owners can be generally categorized as enthusiastic. Several of the experienced interviewers commented that the reaction of respondents in this survey was the most friendly and enthusiastic they could recall.

Owners who use horses for business purposes average 17 horses per owner in contrast with an average of 3.8 horses per owner for the recreation use category. In the horse business category, use for breeding (22.8%) and pregnant mares urine production (PMU) (27.4%) are the most significant.

At least two–thirds of the horses used in PMU production are of draft breeds or heavy horse crossbreeds. In the recreation and farm work category, recreation use accounted for 45.7% followed by working saddle at 39.2%. Nearly 43% of the horses in this category are of the quarterhorse breed with Arabians second at 10.8%.

Thirty–three hundred (3,300) owners reported nearly 8,000 breeding mares and over 1,400 stallions. About one–third are registered and two–thirds are grade for both mares and stallions. Of the 3,300 owners of breeding horses, 350 own six or more registered mares with

48 of these keeping over 20 mares. Three-quarters of all breeding mares foal at an average 18 month interval. While nearly 900 owners said they were in the breeding business, only the 350 owners with six or more mares were considered by the study team to be substantially in the breeding business. Sixty-seven owners of thoroughbred breeding mares and nine owners of standardbred breeding mares specialize in the breeding business and do not participate in racing activities.

Participation in horse events is a high priority among horse owners. They make 21,500 event entries annually with 92% of these being events held in Saskatchewan. Entries at fairs and exhibitions are the biggest item at 32.5% with trail rides and parades being second and third in popularity.

A majority of the recreation horse owners enter one or two events per year but a small number (about 300) enter over ten events per year. For example, 185 owners each make about 20 entries per year at fairs and exhibitions. These are believed to be the owners of high quality stock who travel the circuit during the show and exhibition season.

Saskatchewan horse owners are very active in horse marketing. During the 12 months preceding the study, 25% of owners sold 20,500 horses and 21% of the owners bought 13,850 horses. About two-thirds of this trade was for feedlot and/or slaughter.

Persons who are in the "Horse Business" make about 75% of total horse purchases and sales and in excess of 85% of out-of-province purchases and sales. In both sales and purchases, about 80% of the business is for feedlot and slaughter. However, when feedlot and slaughter horses are not included, the "Horse Business" owner's share of the sales and purchases dropped to 54% and 40% respectively with the exception of breeding horses, where the operators of a "Horse Business" account for most of the transactions.

A computer library search was conducted for horse industry literature in the United States and Canada. While several studies, mostly Canadian, offered valuable insight into popular research methodology, they were limited to consideration of certain aspects of the industry

and do not provide a comprehensive profile. The studies reviewed were largely based on secondary data and extrapolations based on "rules of thumb". No previous study was found which utilized as much primary statistical data on the horse industry as was undertaken during this study and no other case of contracting with an official statistics agency, as was the case for this study, was discovered.

4. EXPENDITURE AND INVESTMENT SURVEY

4.1 METHODOLOGY

4.1.1 Classification

The review of previous studies found in Chapter 2 of this report reveals the difficulty of arriving at meaningful classifications and categories for horses and horse owners. Various methods have been used to estimate horse counts and annual expenditures for different types of horses and owners. A summary of classifications used for the most relevant studies is provided below.

1972 (Alberta)

Breeders, Pleasure Horse owners, Dude Ranches, Racing Stables, Boarding Schools, Farmer–Ranchers

1984 (B.C.)

Racing, Top Competition, General Competition, Pleasure and Range

1986 (Canada)

Breeding, Racing, Rodeo, Own Pleasure, Show Pleasure, Commercial Riding, Establishment Pleasure, Farm and Other Work, Ranch Work, Police Horse

1988 (Sask.)

Pleasure and Working, Racing, Heavy, PMU, Slaughter

Although no industry wide classification methodology has evolved, there has been an attempt to isolate some of the "horse business" types in all of the previous studies. This emphasis was continued as part of the methodology and several new features of classification were added for the present study.

The broad objective was to develop clearly defined categories which would minimize the problem of overlap encountered in previous studies. Categories were defined with a view to providing Saskatchewan Horse Owners with classification alternatives relevant for the local horse industry.

For this study, horse owners and horses were divided into two broad categories. Within these two broad categories of horse ownership, ten sub groups were identified and treated as separate classes for the purposes of the personal interviews for expense and investment survey and for the telephone survey which was conducted after the personal interviews were completed.

Classification Methodology

1. **Horse ownership Where The Main Purpose Is A Specific Horse Business**

   Breeding – Establishments where horse breeding is carried on as a business

   Training and Resale – horses are purchased, trained and developed for instruction, personal use and resale

   Racing – thoroughbred and standardbred

   Rodeo – horses supplied for use in rodeo events

   PMU – horses used for collection of pregnant mare's urine

2. **Horse Ownership Where The Main Purpose Is Recreation Or Work**

   Pleasure and Recreation – horses are owned for the personal recreation of the owner, and activities are generally limited to use around the farm or establishment

   Working Saddle – horses are owned by farmers and ranchers mainly for work with livestock around the farm or ranch

   Draft Horses – heavy horses used mainly for farm and ranch work

   Competition and Event Horses – horses which are not part of a specific horse business but which travel to parades, shows, competitions, trail rides and other events

   Driving Horses – light horses used mainly for recreation around the farm or establishment.

4.1.2 Personal Interviews

A total of 69 personal interviews were completed with Saskatchewan horse owners during the spring and early summer of 1989. The data from 66 horse owners was eventually used generating

75 horse category observations. These respondents owned 905 horses distributed over 10 horse ownership categories.

An original list of over 100 names was developed through contacts with the Saskatchewan Horse Federation and other Associations to identify a pool of 'representative' horse owners from all categories in all parts of Saskatchewan. Of these representative horse owners, about 1/3 were eventually surveyed, making up about half of the cost survey sample. The remaining horse owners surveyed were selected by the study team.

Although the survey sample was selected on a more or less random basis, other considerations also had an impact on the final selection of respondents. For example, initial availability, willingness to provide information and interview scheduling problems are factors which always influence the sample. These are practical limitations to randomness in interview sample selections in the farm community.

The study team is of the opinion that the respondents to the personal interviews are fairly representative of the horse industry in Saskatchewan. It is inevitable that the selections were biased toward the more easily reachable and co-operative horse owners. These respondents are not necessarily "higher profile" or "top end" horse owners, nor are they necessarily the horse owners on the low end of the expense and investment scale. General observations made by the study team indicate that any selection bias due to this factor had an indeterminant effect on the results of the survey in terms of investment and expenditure levels on a per horse basis.

Horse owners were generally very receptive to the interviewers, although there were several refusals. A more common problem was reaching horse owners by telephone initially and then matching available times to schedule an interview. The interviews generally required from 20 minutes to 1 hour to complete. Interviewers often found it difficult to keep friendly hospitality from stretching out the time spent at the respondents' home or place of business.
In most instances, horse owners had no organized record of expenditures, and a statement of costs had to be developed by the respondent during the interview. In some cases, especially where other livestock were present on the farm, allocating a percentage of investment to the horses was

particularly difficult. A pattern was usually evident in that respondents were most receptive and enthusiastic where asked to describe their horses, but often found questions about annual cash expenditures difficult and wearisome.

A copy of the interview questionnaire and details of interview procedures and guidelines is contained in Appendix 3.

4.2 SURVEY RESULTS

4.2.1 Profile of Respondents

A profile of survey respondents is provided in Table 31. Several important observations should be noted regarding the information in this table.

(1) The number of horses per farm is in the range to be expected in the population at large, although the breeding and racehorse owners maybe somewhat larger than the average expected in the general population.

(2) The percentage of horses which are registered is about the same as expected for the general population of horses.

(3) The percentage of horses raised is low for most categories, but about in line with expectations based on the high volume of horse transactions observed in the general population.

(4) Considerable uncertainty exists in many cases regarding the actual market values of horses, because in many cases values were estimated by horse owners to be in a 3–4 year downtrend. As a general rule, older untrained horses were valued as low as $400–500. Respondents were usually realistic and reasonably conservative in valuing horses, with less than 10% of the horses were valued at more than $3,000. Horses valued at more than

$5,000 were less than 5% of the total, usually limited to racehorses, breeding stock, and top competition horses.

(5) The data shows no clear relationship between the number of horses per owner and values of individual horses. Factors such as type of horse ownership and personal spending capability of owners appears to be a more powerful determinant of horse values than scale of operation for individual horse owners.

(6) The personal interviews were completed during the spring foaling season. In order to achieve consistency, foals were not included in the number of horses used to establish the profile of respondents provided in Table 31.

4.2.2 Investment in Horses and Other Assets Association With Horses

A summary of investment in horses and assets associated with horses is provided in Table 32. The main items which are responsible for high levels of investment/horse are: horse values (breeding horses, racehorses and rodeo horses); and tack, tools and supplies (training and resale, competition and event horses, draft horses and driving horses.) There are several important points to note regarding the investment information reported in Table 32.

(1) Investment in horses ranges from about 25% – 60% of total investment for individual horse owners.

(2) Investment in buildings and improvements is relatively high for training and resale, racehorses, competition and event horses, due mainly to frequency of stables, riding rings and arenas for horse owners in those categories.

(3) Investment in transportation equipment is about equally divided between trucks and trailers and is relatively high for training and resale, and competition and event horses, mainly due to the high mobility and frequent campaigning by owners in those categories.

(4) Other equipment includes a share of investment in tractors, haying and other farm equipment. It also includes equipment such as sleighs, cutters, wagons, carriages, walkers etc.

(5) Tack, tools and supplies includes saddles, bridles, harness, farrier tools, blankets, wearing apparel, grooming equipment etc. Investment in this item tends to be higher when horses are taken to shows and events, and for draft and driving horses which require harness.

(6) The data from survey respondents shows little relationship between the number of horses per owner and investment per horse. For PMU (28–168 horses/owner) and Thoroughbreds (12–48 horses/owner) the wide variation in size of operation was not associated with differences in investment per horse. For Standardbreds (8–39 horses/owner) and Breeding (5–35 horses/owner), the wide variation in size was associated with differences in investment for the horse owners interviewed, with larger units having less than 1/2 the investment/horse compared to the smaller units. As a general rule, however, it appears that other factors, such as the category itself and the personal style of the owner appear to be the main determinant of investment levels for survey respondents.

(7) Investment levels reported in Table 32 are based on a horse count which excludes foals.

4.2.3 Annual Operating Expenses

As summary of annual expenditures by horse owners is provided in Table 33. The main items which are responsible for high levels of annual expense/horse appear to be source and quality of feed (racehorses and show horses) and training, instruction, show and competition costs (racehorses, training and resale, and competition and event horses.) Several important observations regarding the expenditure figures reported in Table 33, are noted below.

(1) Differences in the expenditures related to land and improvements are generally related to differences in investment in buildings and improvements. Maintenance is an important cost component for this item.

(2) Differences in expenses for vehicles and equipment are mainly due to differences in fuel and repairs for transportation equipment. Competition and event horses and horses owned for training and resale business purposes have relatively high expenses for this item.

(3) Animal care averages about 60% for veterinary services and medicine, 35% for farrier services, and about 5% for supplies such as insecticides, antiseptic and protective materials. There are wide variations in annual care costs within categories and between categories. An important factor to note here is that many owners attend to health and feet maintenance themselves. The value of these services supplied by the horse owner is not included in the estimates for animal care costs reported in Table 33.

(4) Feed and bedding costs reflect cash paid for purchased feed and "opportunity cost" of homegrown feed. Homegrown feed was generally valued at 75% of the price of similar purchased feed across the sample. Feed costs for rodeo and farm horses tend to be relatively low because of the frequency of "winter grazing" as a source of cheap feed. There is also a tendency toward higher quality feed for racehorses and show horses. Size of horse is also a factor, as reflected by the PMU and draft horse feed costs.

There were also wide variations in relative amount of homegrown and purchased feed between categories. For thoroughbreds, almost all of the feed was purchased, but for Standardbreds, almost half of the feed was homegrown. For working saddle and pleasure horses, most of the feed was homegrown, but for training and resale horses most of the feed was purchased. For draft horses, almost all of the feed was homegrown. Other categories were in the range of 50% from each feed source.

(5) Other expenses included training, instruction, breeding fees, personal travel costs for competitions and shows, insurance, utilities and miscellaneous costs.

The main items in other costs for racehorse owners tend to be training costs and off farm stabling. The main items in other costs for training and resale owners and competition

and event horse owners are training, instruction, entry fees and personal travel costs for attending shows and competitions.

(6) The data show no consistent relationship between the number of horses per owner and operating expenses per horse. Standardbred owners and breeding farm owners provide the only examples of any association between operating expense/horse and size of operation, and these differences appear to be mainly due to the personal wealth and style of the respondents involved.

As a general rule differences between categories and the personal resources of the owner appear to be more important determinants of cost levels than the number of horses/owned.

(7) Annual expenditures per horse reported in Table 33 are based on a house count which excludes 1989 foals Expenses per horse were adjusted accordingly when used in conjunction with the phone survey horse count, to develop global estimates of expenditures for 1989.

TABLE 31 PROFILE OF COST SURVEY RESPONDENTS

Category	Number of Horses/Farm	Av. Age /Horse	Percentage Registered	Percentage Raised	Percentage Trained	Value of Horses ($) Per Owner	Per Horse
BUSINESS							
Breeding	17.3	5.5	91	43	75	55,014	3,180
Racing							
T'Bred	26	4.5	95	78	81	190,320	7,320
S'Bred	18.3	5.7	76	56	71	70,876	3,873
Training & Resale	6.7	6.3	100	50	95	26,968	4,025
Rodeo	67.0	8.0	5	60	30	120,000	1,791
PMU	79.0	6.7	56	66	77	114,234	1,446
REC/WORK							
Pleasure & Rec.	3.1	8.6	60	28	88	3,178	1,025
Working Saddle	2.1	7.7	48	35	91	2,520	1,200
Draft	2.6	5.8	38	23	100	3,578	1,376
Competitions & Event	3.7	8.0	64	34	92	7,393	1,998
Driving	1.8	8.3	43	14	100	2,790	1,550

Business – Horse ownership where the main purpose is a specific horse business.
Rec/Work – Horse ownership where the main purpose is recreation and/or work.

- 1989 Foals not included in horse count.
- Percentage raised = Percentage foaled by the owner.
- Percentage trained = Horses already trained or being trained by owner or other trainer.

NOTE: Information derived from interviews with 69 horse owners, resulting in 75 category observations.

TABLE 32 INVESTMENT SUMMARY FOR COST SURVEY RESPONDENTS

		Investment Items ($ Per Horse)					
	Horses	Past & Hayland	Bldg & Improve.	Trans Equipment	Other Equipment	Tack, Tools & Supplies	Total Investment Per Horse ($)
BUSINESS							
Breeding	3,180	775	942	507	341	413	6,178
Racing							
T'Bred	7,320	1,217	3,500	603	743	372	12,735
S'Bred	3,873	1,290	1,000	527	255	145	7,117
Training & Resale	4,025	375	3,775	1,975	300	1,575	12,000
Rodeo	1,791	522	172	187	462	75	3,209
PMU	1,446	987	835	139	348	142	3,897
REC/WORK							
Pleasure & Rec.	1,025	1,075	992	378	430	788	4,688
Wrking Saddle	1,200	483	408	400	308	650	3,449
Draft	1,376	730	869	346	554	962	4,837
Comp.& Event	1,998	712	1,864	2,050	329	1,663	8,616
Driving	1,550	943	400	285	314	1,357	4,849

- Investment in horses at values reported by owners.
- Pasture & Hayland at estimated value of land for agricultural uses.
- Buildings and equipment generally valued as replacement cost X depreciation factor based on age.

NOTE: See Appendix 3 for detailed explanation of valuation procedures.

TABLE 33 ANNUAL OPERATING EXPENSES SUMMARY FOR COST SURVEY RESPONDENTS

Category	Areas of Expenditure ($ Per Horse) Land & Improve.	Veh. & Equip.	Animal Care	Feed & Bding	Other Exp.	TOTAL Annual Exp Per Horse
BUSINESS						
Breeding	80	174	109	320	174	857
Racing						
T'Bred	244	179	179	807	1,859	3,268
S'Bred	127	127	236	764	891	2,145
Training & Resale	275	288	238	488	788	2,077
Rodeo	45	246	25	195	56	567
PMU	107	127	47	405	82	768
REC/WORK						
Pleasure & Rec.	83	65	115	370	63	696
Wrking Saddle	38	88	83	275	38	522
Draft	131	77	115	438	77	838
Competition & Event	131	353	193	436	793	1,906
Driving	141	100	71	330	357	999

- Debt service costs not included. Most respondents do not have debts directly associated with horse ownership.
- Animal care is about 60% vet & med, 35 farrier and 5% supplies.
- Feed 2/3 homegrown and 1/3 purchased.
- Labour costs not included. Most respondents utilize owner's or unpaid family labour.

4.3 SUMMARY & CONCLUSIONS

The classification methodology developed for the survey provides a workable system for classification of horse ownership in Saskatchewan.

The questionnaire used for the survey provided a satisfactory structure for the personal interviews. Respondents were generously positive in their reactions to the interviews. Most respondents did not have a statement of annual expenditures and in some cases found the process of "cost accounting" for their horse related activities to be a difficult task with an unexpectedly high outcome. For some respondents survey methodology could have been improved by a pre-interview mail out form outlining the detailed information required on annual expenditures.

The great majority of respondents enjoyed the personal interviews and expressed keen interest in the results of the survey.

The objective was to select horse owners which were "representative" of various segments of the horse industry and the selection of respondents was therefore not random in the statistical sense. In several instances the study team attempted to select randomly in the "low profile" side of the horse industry as a "check" on the representative nature of the main list of potential respondents. These efforts probably made the total interview sample more representative, although the main list of horse owners suggested by horse association officials and other industry sources provided interview contacts which appear to be very close to the mainstream of the industry.

The total of 75 observations for 10 individual sub-categories of horse ownership provided adequate depth for these purposes within the constraints of the study budget.

For the overall survey, horses generally required less capital than other investment items. Feed generally accounted for less than half of the annual expenses, especially for the "horse business" horses in category one and the competition and event horses in category two.

Variations in investment and annual expenditures can in most cases be easily explained by the unique requirements or standard conditions of animal husbandry associated with the different types of horse use and ownership. In addition to the type or use category, the personal style and financial capabilities of the owner also appear to be an important determinant of the level of investment and expense per horse. As a result, differences in investment and annual expenditures between categories can often be due to a combination of differences in type of ownership (or use category) and differences based on the personal characteristics of the owners involved.

Approximately 1/3 of the respondents owned horses for a specific horse business. Investment in horses ranged from an average of about $27,000 per owner (6.7 horses) for training and resale to about $190,000 per owner (26 horses) for Thoroughbred racehorses. Values per horse ranged from a low of less than $1,500 for PMU operations to a high of over $7,000 for Thoroughbreds.

Approximately 2/3 of the respondents owned horses for work or recreation. Investment in horses ranged from about $7,400 per owner (3.7 horses) for competition and event horses to about $2,500 per owner (2.1 horses) for working saddle horses. Values per horse ranged from just over $1,000 per horse for pleasure and working saddle horses to just under $2,000 for competition and event horses.

About 1/2 of the horses owned by respondents were registered, ranging from 5% for rodeo horses to over 90% for breeding farms, training and resale operations and Thoroughbred racehorses.

The respondents had raised about 1/3 of the horses they owned in 1989. Most of the category 1 respondents had raised more than 1/2 of their horses themselves, but this was true for less than 1/3 of the respondents for category 2. These observations underline the high level of transactions which characterize the horse industry and imply that there is an important market for those in the breeding and/or training and resale business. This would be particularly true for pleasure and working saddle categories which includes more than half of the horse population and over 80% of the owners.

Total investment per horse ranged from a low of about $3,200 for rodeo horses to almost $13,000 for Thoroughbred racehorses. Average investment for all respondents was in the range of $4,600 per horse. Investment items "other than horses" contributed about 2/3 of this level of investment.

It should be noted that competition and event horses were associated with high horse value and total investment of about $8,600 per horse. There horses, although not owned for a specific horse business, must make a significant contribution in the horse event and entertainment industry.

Annual operating expenses ranged from a low of just over $500 for working saddle horses to just over 3,000 for Thoroughbred racehorses.

Competition and event horses are also associated with high annual expenses of almost $2,000 per horse. This is about equal to the expenses for training and resale operations in the horse business category. There horse owners provide significant amounts of cash expenditures to campaign on the circuit of parades, fairs, shows and competitions. These are all events which form the backbone for local tourist and reunion attractions and community participation throughout Saskatchewan.

Since the great majority of respondents did not use hired labour and did not borrow money specifically for their horse activities, labour and interest were not included in the annual expenses. A 10% opportunity cost on capital investment would have been equivalent to about 50% of annual expenses for the respondents as a group. Clearly, free capital and free owners labour understate the true annual expenditure in terms of opportunities for other business activity.

The results of the survey clearly show that horse ownership and related activities are associated with major investments and annual cash expenses. Furthermore, the economic impact is not associated with the horse business sector alone, but spreads across the entire spectrum of horse activities.

5.0 ECONOMIC IMPACT

5.1 Methodology

The report on the Economic Impact of the Horse Industry commissioned by the Canadian Horse Council in 1986 states simply that "...The economic impact of the horse industry is a result of owners, their establishments and spectators spending money."

Although the separation between business and pleasure in the horse industry is usually not clear insofar as individual owners are concerned, the level of investment and expenditures in the horse industry does have a major economic impact.

The horse industry is particularly difficult to analyze in economic terms because of the dichotomy between business and pleasure which is associated with horse ownership. Horse owners will generally admit their love for horses and that there is substantial "psychic income" associated with horse ownership. The problem of separating business and sport in economic terms was noted by Adam Smith in the 17th century when he observed that "... Whosoever does for pay what other do for sport, is sure to be low paid." Although Smith was referring to hunting in his day, the comment aptly describes the economics of horse ownership in our day.

The estimates of global investment and expenditure for this report were generated by using the results of the cost and expenditure survey outlined in Chapter 4, in combination with the results of the horse count resulting from the Statistics survey described in Chapter 3.

The investment in depreciable assets was isolated and yearly set aside requirements were estimated. These set aside amounts are required annually to maintain the value of depreciable assets, and were added to the expenditure estimates contained in Table 33 to produce estimates of total annual expenditures.

The individual types of expenditures were grouped to provide an estimate of annual expenditures by type of supply or service. This provides an insight into the income flowing into various sectors from the horse industry.

Revenue flows to horse owners were estimated by referring to the results of the study survey and several secondary sources such as Statistics Canada, Saskatchewan Economic Development and Tourism, Saskatchewan Department of Agriculture, Saskatchewan Racing Commission, Horse Industry Publications and numerous personal contacts made with individuals throughout the industry.

Estimates of spectator attendance were generated by reference to materials provided by Racetracks, Rodeo and Light Horse Associations, Saskatchewan Economic Development and Tourism and the Saskatchewan Horse Federation. A sample of organizers and officials associated with spectator events was also interviewed by telephone. These contacts provided guidelines for attendance at various events and also generated first hand information about the economics and importance of horse industry events to local communities.

Although no survey of direct employment was carried out as part of the study, estimates of the commitment of human resources to the horse industry in Saskatchewan are presented as part of the analysis. Some of the employment estimates were generated by contacting various industry sources who had data or at least some knowledge of volunteer and paid workers.

Most of the estimates were developed by applying wage percentage factors to the global expenditure estimates, and then dividing by guesstimates of earnings per person year in the various sectors. This methodology was used in the absence of official input and output data for local sectors involved.

5.2 Investment by Horse Owners in Saskatchewan

The total investment by horse owners is estimated to be in the range of $290 million. Of this total, about 1/3 is attributed to the value of horses, and 2/3 to investment in land, improvements, vehicles, equipment and tack, tools and supplies. About 40% of the total investment is in the

horse business category and 60% is provided by owners who keep horses for recreation or work. See Table 34, and Figures 4 and 5.

The average investment per horse is calculated to be $4,650, consisting of an average horse value of $1,600 and $3,050 in other assets. Investment per horse is lowest for rodeo and working saddle horses and highest for owners who have horses for training and resale, owners who attend competitions and events, and racehorses.

It is important to note the high investment associated with horses in the pleasure category which attend competitions and events. This group comprises just over 3% of the horse population and almost 6% of total investment.

Horses represent the single largest investment item at $100 million and are counted as depreciable assets for study purposes. Depreciable assets represent 85% of total investment.

TABLE 34 TOTAL INVESTMENT BY HORSE OWNERS IN SASKATCHEWAN

Categories of Horse Use	No. of Owners	No. of Horses	Investment /Horse	Total Investment in Sask.
			$	Million $
BUSINESS				
Breeding	897	5,905	4,900	28.9
Racing	426	3,172	8,000	25.4
Training & Resale	371	4,175	10,800	45.1
Rodeo	154	1,147	2,800	3.2
PMU	133	5,606	2,900	16.3
Other	30	465	6,000	2.8
Sub-Total		**20,500**	**5,950 (av)**	**122**
REC/WORK				
Pleasure and Recreation	6,603	19,204	4,200	80.7
Working Saddle	4,613	16,454	3,100	51.0
Draft Horse	1,037	3,126	4,600	14.4
Competition & Event	575	2,007	8,200	16.5
Driving Horse	409	1,170	4,600	5.4
Other	15	27	4,200	.1
Sub-Total		**42,000**	**4,000 (av)**	**168**
TOTALS	*	**62,500**	**4,650 (av)**	**290**

* Some owners appear in more than one category. The sum of the owners in Table 34 is about 3,500 greater than the estimate of actual horse owners in Sask.

* Table 33 values are adjusted to account for 1989 foals in the Statistics Canada horse count and in the case of racehorses, adjusted according to 50% Thoroughbred, 20% Standardbred and 30% Other (Chuckwagon & Chariot Horses, Quarterhorses, Arabians, etc.)

Figure 4 – Investment by Horse Owners for Specific Horse Business
($ millions)

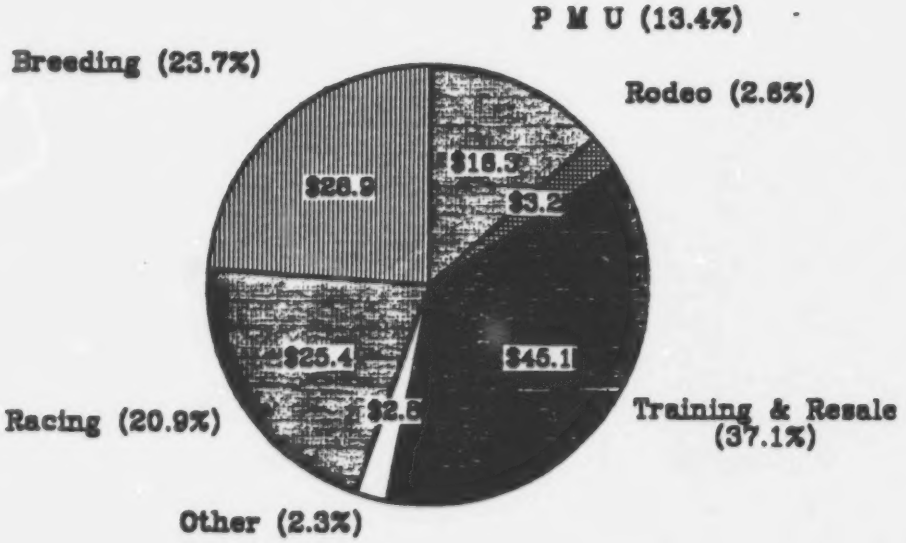
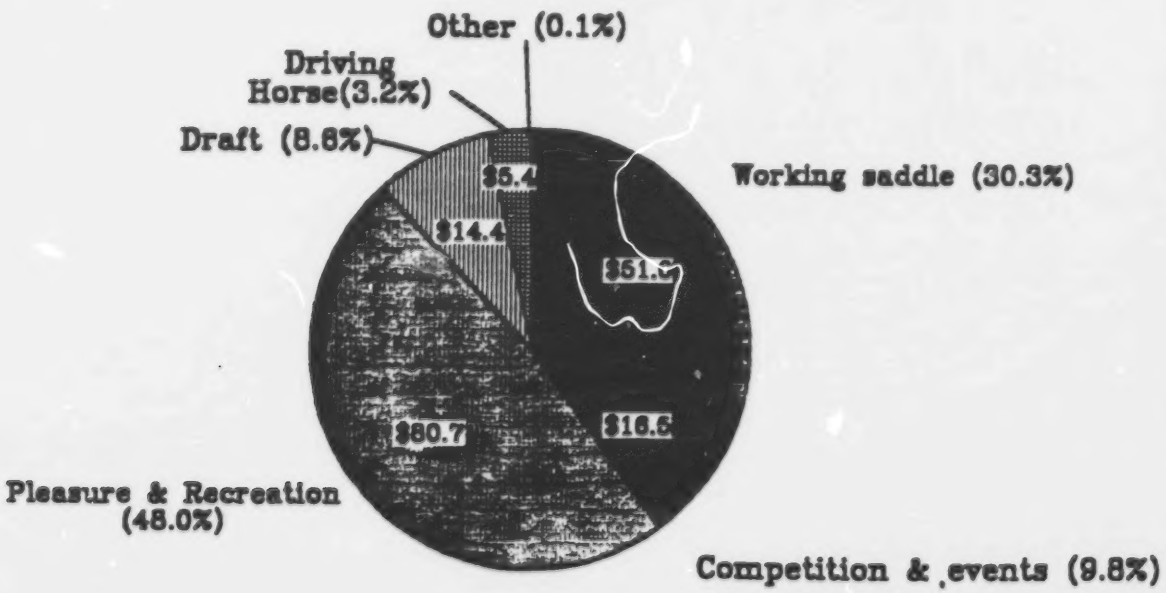


Figure 5 – Investment by Horse Owners for Recreation and/or Work
($ millions)



It should be emphasized that farmland was valued at its value for agricultural uses. In some cases, horse establishments are near urban centres where the land has additional real value due to speculation for development (Table 35).

TABLE 35 TOTAL INVESTMENT BY TYPE OF ASSET

	Business	Rec/Work	TOTAL	Percentage
	$ Million			
Farmland	15	28	43	15
Depreciable Assets				
Buildings & Improvements	27	31	58	20
Vehicles & Equipment	17	32	50	17
Tack, Tools & Supplies	8	31	39	13
Horses	55	45	100	35
TOTALS (million $)	**122**	**168**	**290**	**100**

- Investment in depreciable assets totals $247 million.

Investment in private and public facilities used for horse industry events, instruction and training was not included in the estimates presented in Tables 34 and 35. The percentage of investment attributable to horses is very difficult to estimate for facilities at exhibitions and fairgrounds, and no direct survey was undertaken to obtain investment data from the several large riding and instructional establishments.

A "ball park" estimate based on general information gained during the course of the study could suggest that investment in "infrastructure facilities" is somewhere in the range of $10–25 million for Saskatchewan, with most of the total directly associated with racing and rodeo.

5.3 Annual Expenditures by Horse Owners in Saskatchewan

Saskatchewan horse owners are estimated to spend close to $50 million per year for "cash operating" expenses. The estimates provided in Table 36 include all cash costs except for debt service and hired labour. The incidence of hired labour is mainly limited to the business categories. For many of those operations hired labour was reported under training costs, so the omission of labour as a separate cost item should be generally acceptable.

Based on study results, it appears that very few horse enterprises are associated with debt service costs. This no doubt reflects the dichotomy in terms of business and pleasure, the associated reluctance of bankers to lend for horse business purposes, and the financial status of most horse owners.

Table 36 reveals that about 45% of the annual cash operating expenses are associated with the horse business categories. The owners who keep horses for training and resale spend more than owners of racehorses, but less than those who own horses simply for their own pleasure and recreation.

TABLE 36 TOTAL ANNUAL EXPENDITURES BY HORSE OWNERS IN SASKATCHEWAN

Categories	No. Of Owners	No. Of Horses	Av. Exp. /Horse	Total Expense
BUSINESS			$	Million $
Breeding	897	5,905	680	4.0
Racing	426	3,172	1,860	5.9
Training and Resale	371	4,175	1,870	7.8
Rodeo	154	1,147	520	.6
PMU	133	5,606	570	3.2
Other	30	465	1,300	.6
Sub-Total		**20,500**	**931 (av)**	**22**
REC/WORK				
Pleasure & Rec.	6,603	19,204	620	12.0
Working Saddle	4,613	16,454	470	7.8
Draft	1,037	3,126	770	2.4
Competition & Event	575	2,007	1,840	3.7
Driving	409	1,170	1,030	1.2
Other	15	27	660	—
Sub-Total		**42,000**	**643 (av)**	**27**
TOTALS		**62,500**	**790 (av)**	**49**

- Table 33 values are adjusted to account for foals in horse count and in the case of racehorses adjusted according to 50% thoroughbred, 20% standardbred & 30% other (chuckwagon and chariot ponies, Quarterhorse, Arabian, etc.)

- Some owners appear in more than 1 category

The average cash operating expense over the whole industry is close to $800 per horse per year. Feed costs are responsible for about $320 or about 40% of operating costs.

Annual expenditures also includes reinvestment in assets associated with horses. Table 37 provides estimates of investment in depreciable assets and the yearly replacement expenditures required to maintain the level of investment.

The annual set aside for herd replacement was calculated by using average value less salvage, divided by twice the average age of horses in the costs and investment survey. The average arithmetic used was ($1600 -$400) divided by 12 = $100 per horse/year. The actual estimates for each sub category of horse ownership were calculated using the appropriate horse values. For example, the replacement cost for breeders was $152/horse/year, $215 for training and resale, $345 for racehorses, and about $62 for pleasure and working saddle horses.

The total herd replacement requirement was thereby estimated to be in the range of $6 million with the biggest markets in the pleasure, working saddle and racing categories.

The annual replacement requirement for other assets such as buildings, corrals, water supplies, vehicles, equipment, tack etc. was calculated at a straight 10% of estimated value, and thereby estimated to be about $15 million.

Table 37 ESTIMATE OF ANNUAL REQUIREMENTS FOR REPLACEMENT EXPENDITURES BY SASKATCHEWAN HORSE OWNERS

	Investment in Depreciable Assets (Millions $)				Set Aside For Replacement (Millions $)	
Categories of Horse Use	**Horses**	**Improve ments**	**Veh & Equip**	**Tack/Tools/ Supplies/Etc.**	**Horses**	**Other**
BUSINESS						
Breeding	15.0	4.2	3.7	1.8	.9	1.0
Racing	16.0	6.4	3.0	.7	1.0	1.0
Training & Resale	15.1	14.2	8.5	5.9	.9	2.9
Rodeo	2.1	.2	1.0	.1	.1	.1
PMU	6.1	3.3	1.9	.6	.4	.6
Other	1.4	.3	.2	.2	.1	.1
Sub-Total	**55.0**	**28.6**	**18.3**	**9.3**	**3.4**	**6.7**
REC/WORK						
Pleasure & Recreation	17.7	17.1	13.9	13.6	1.1	4.5
Working Saddle	17.7	6.0	10.5	9.6	1.1	2.6
Draft	4.1	2.6	2.6	1.5	.3	.7
Competition & Event	3.8	3.6	4.5	3.2	.2	1.1
Driving	1.7	.4	.6	1.5	.1	.2
Sub-Total	**45.0**	**29.7**	**32.1**	**29.4**	**2.8**	**9.1**
TOTALS (Mil$)	**100.0**	**58.0**	**50.0**	**39.0**	**6.0**	**15.0**

TABLE 38 TOTAL ANNUAL REQUIREMENT FOR OPERATING PLUS REPLACEMENT SET ASIDE

(Millions $)

	Operating Expense	Herd Replacement	Replacement of Other Assets	Total Annual Expenditures
BUSINESS				
Breeding	4.0	.9	1.0	5.9
Racing	5.9	1.0	1.0	7.9
Training & Resale	7.8	.9	2.9	11.6
Rodeo	.6	.1	.1	.8
PMU	3.2	.4	.6	4.2
Other	.6	.1	.1	.8
Sub-Total	**22.1**	**3.4**	**5.7**	**31.2**
REC/WORK				
Pleasure & Recreation	12.0	1.1	4.5	17.6
Working Saddle	7.8	1.1	2.6	11.5
Draft	2.4	.3	.7	3.4
Competition & Event	3.7	.2	1.1	5.0
Driving	1.2	.1	.2	1.5
Sub-Total	**27.1**	**2.8**	**9.1**	**39.1**
TOTAL (Million $)	**49.2**	**6.2**	**14.8**	**70.0**

* Estimates do not include hired labour, debt service requirements or opportunity costs for owners' labour and equity.

The total replacement requirements of $21 million plus the operating costs at $49 million, results in total annual expenditures of $70 million. Table 38 reveals that about 45% of the annual expenditures are carried by the owners who have horses for business purposes. .Of the annual expenditures of $31 million, about 37% is attributable to training and resale and 25% to racing. In the non-business category, $29 million is attributable to pleasure and working saddle horses, mainly due to the large numbers of horses in these groups.

Table 39 provides an analysis of annual expenditures based on the type of supply or service. The supplies of feed represents the largest single service to the horse industry. Based on cost study responses, about 2/3 of the feed cost is for homegrown feed. Of the total cost, about $13 million is in opportunity costs, that is, the farmer could have sold the hay or grown something else which could have been sold. About $7 million is paid to others for feed supplies. At least 90% of this expenditure is for hay and oats. Although no separate survey was taken for sales by composite feed manufacturers, it is likely that this feed source represents less than 5% ($1 million) of total feed costs.

TABLE 39 ESTIMATE OF ANNUAL EXPENDITURE BY HORSE OWNERS IN SASKATCHEWAN BY TYPE OF SERVICE

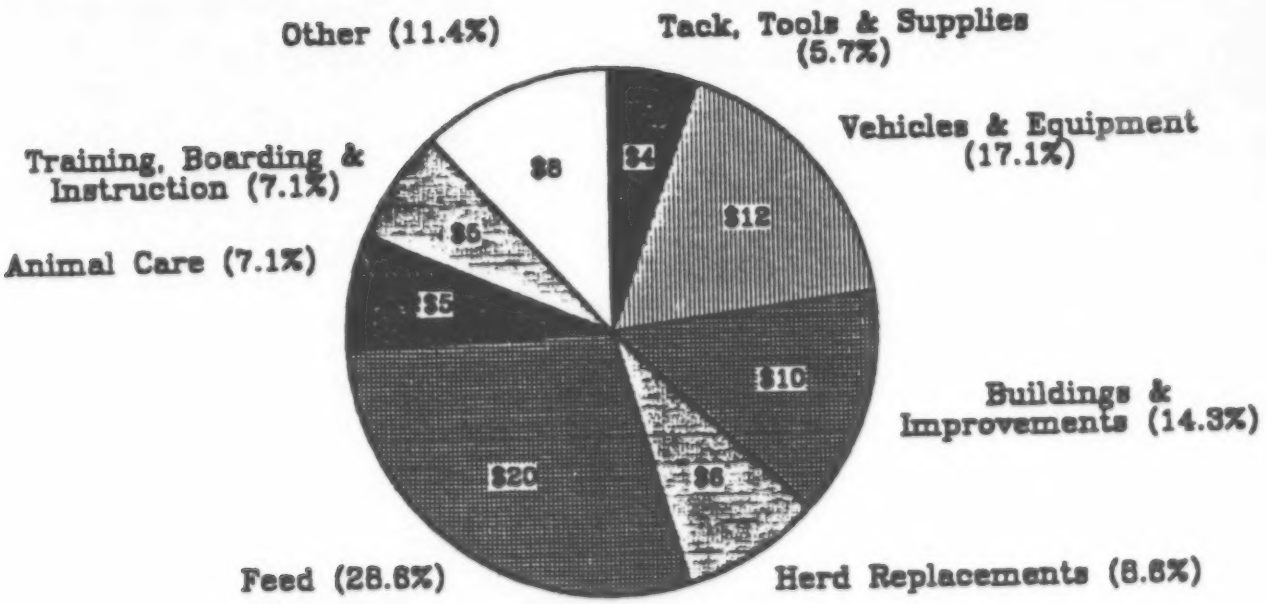
Type of Supply of Service	Annual Expenditure			
	Business	Rec/Work	TOTAL	Percentage
	Million $			
Feed (Hay, Grain, Prepared Feeds)	9.0	11.0	20	29
Vehicles & Equipment (Replacement, Sales, Fuel, Repairs)	4.0	8.0	12	17
Building & Improvements (Replacement, Contractors, Retailers)	5.0	5.0	10	14
Herd Replacements	3.3	2.7	6	8
Training, Boarding, and Instruction	2.5	2.5	5	7
Animal Care (Vet. & Med., Farriers)	2.5	2.5	5	8
Tack/Tools/Supplies	1.0	3.0	4	6
Other	4.0	4.0	8	10
TOTAL	**31.0**	**39.0**	**70**	**100%**

* Annual expenditures include cash operating expenses and replacement of depreciable assets.

* Other annual expenditures include utilities, communications, advertising, insurance, entry fees, personal travel, subscriptions, memberships, custom hauling, racetrack fees, breeding fees, property taxes.

Figure 6 – Annual Expenditures by Horse Owners

($ millions)



Expenditures in the buildings and improvements sector are estimated to be in the range of $10 million annually. The items of expense include maintenance and replacement construction. About $12 million is required for repairs, replacement and fuel for vehicles and equipment. This includes service and new sales to replace worn out and obsolete items, mainly in the line of trucks and trailers.

Animal care is estimated to claim expenditures of $5 million annually. About $4 million is due to Veterinary services, medicine and health supplies. The study estimates that horse owners pay approximately $1 million for farrier services.

This estimate for animal care can be related to the use of external services reported in Table 24. The results of the Statistics Canada telephone survey indicate that about 3,800 horse owners used veterinarians in 1989, for a total of about 13,000 times. In addition, about 2,700 horse owners used farriers about 12,400 times. Assuming an average vet, med, and supply bill of $250 per time, and an average of about $125 per time for farriers, the total spent on health would be about $3.3 million and the total spent on feet about $1.6 million, for a total of $5 million as estimated in **Table 39**.

Herd replacement has been discussed in connection with **Table 37**. The estimates of $6 million would provide sufficient replacements to maintain the population at present levels.

Training, boarding and instruction are usually interrelated costs and are difficult to assess separately. Training and instruction are often associated with horses which are not at the place of the owner, so boarding costs are often a part of training and instruction costs and vice versa.

There are approximately 60 Western Coaches in Saskatchewan who are certified by the National Coaches Certification Program (N.C.C.P.) There are in addition approximately 25 English Coaches in Saskatchewan who are certified by the N.C.C.P. These coaches are professionally qualified as instructors and are involved in a wide range of instruction and training, usually working out of facilities with a combination of services available to horse owners and riders, or at local clinics sponsored by horse clubs.

The study estimate for annual expenditures for training, boarding and instruction is $5 million. This estimate can be related to the use of these services reported by respondents to the Statistics Canada phone survey.

The estimate provide in Table 24 is that about 963 horse owners used instruction services about 17,300 times. Assuming that this represents (say) 30,000 hours of instruction at $10/hour, the total expenditure would be about $300,000. If the revenue was shared equally by about 60 certified coaches, the average income from instruction would be estimated at $5,000.

The estimates for the use of training services reported in Table 25 and 26 indicate that about 16,500 weeks of training are purchased, with about 1/3 of the training occurring at the site of the owner and 2/3 at another location. Assuming a composite average of $100 per week for training, the total income to trainers would be about $1.7 million per year.

The estimates for the use of boarding services reported in Table 27 indicate that 431 owners board 1,840 horses year round, 217 owners board 433 horses just in the winter, and 318 owners pay to have horses pastured in the summer. Assuming fees of $175 per month for winter board and $125 per month for summer pasture, the total income paid to those who board houses would be about $4.0 million per year.

The total of instruction, training and boarding, so calculated would be about $6.0 million per year. This methodology results in the double counting of some feed costs however. Since feed costs are reported separately in Table 39, this figure is in reasonable agreement with the $5 million estimate generated from the investment and expenditure survey.

The annual expense for tack, tools and miscellaneous supplies reported in Table 39 was calculated by estimating the annual replacement based on 10% of the level of investment for these items as reported in Table 37. No separate survey was conducted to determine the number of retail outlets in the provinces which cater to this market. However, the study estimate is that there are

15 - 20 major "tack shops" in the province, with somewhere in range of 50 - 100 other retail outlets which sell at least some items which fall into this category.

The annual expenditure for "other" items is complicated by the wide variety of expense items. The most important cost items appear to be personal travel and entry fees for shows and competitions and costs for utilities and communication.

The study estimate for personal travel and entry fees for shows and competitions is about $3 million per year. Reference to Table 18 indicates that about 4,800 owners make about 21,500 event entries per year with 11,500 horses. This implies an average of about 4.5 events per owner. The study estimate is that personal travel and entry fees are in the range of $150 per event. Based on 4,800 owners, at about $700/owner, these annual costs would accumulate to close to $3 million.

Costs for utilities and communication attributable to horses are estimated to be about $125 - 175 per owner, or about $1.8 million per year.

Survey results indicate that owners of stallions sell about 2,000 services per year. No separate survey was conducted to determine the average cost/service, or the cost of services obtained out of the province. The study estimate for breeding fees paid is about $1.3 million comprised of about $1 million in the province and an estimate of $300,000 for services from outside the province.

Property taxes are estimated to be about $500,000 per year. This estimate reflects the generally low municipal assessment for farmyard improvements in rural Saskatchewan.

Racetrack fees and other direct race event costs billed to horse owners is estimated to be about $400,000/year. This represents about $725/owner for those reporting entries in race meets reported to Table 28. This estimate does not include costs for the 29% of Saskatchewan racehorse owners who enter horses in races out-of-province.

Costs for custom hauling expenses are estimated to be in the range of $300,000. Other costs such as advertising, insurance, and memberships, etc. are estimated to be also in the range of $300,000 per year.

5.4 Annual Revenue Flows to Horse Owners in Saskatchewan

Several indirect sources were used to estimate revenue flows associated with the horse industry. These included Statistics Canada, Saskatchewan Department of Agriculture, Saskatchewan Racing Commission, and individuals in the horse industry including individual horse business operators and Horse Association representatives.

TABLE 40 ESTIMATED ANNUAL REVENUE FLOWS TO SASKATCHEWAN HORSE OWNERS

	Revenue Source	Annual Cash Inflow $ Million	
A.	Revenue from Inside Saskatchewan Horse Industry		
	Herd Replacement	6.0	
	Breeding Fees	1.0	
	Training, Instruction & Boarding	5.0	12
B.	Revenue from Outside Saskatchewan Horse Industry		
	Sales to Other Provinces	5.0	
	PMU Revenue	4.5	
	International Sales	2.0	
	Racing Revenue	1.5	
	Rodeo Contractors	.5	
	Other (prizes, awards, gate share, rental)	.5	14
	TOTAL ANNUAL REVENUE FLOW		**26**

The revenue flows to horse owners from inside the Saskatchewan Horse Industry are estimated at $12 million annually. Refer to the explanation related to Table 39 for details concerning estimated revenues associated with herd replacement, breeding fees and training, instruction and boarding.

Revenue flows from outside the Saskatchewan horse industry include sales to other provinces, PMU sales, exports, racing proceeds, payments to rodeo contractors and other items such as prizes, awards, gateshares, rentals, etc.

The main income item under Section B in Table 40 is sales to other provinces. The main category as reported in Table 29 is horses for slaughter, estimated to be about 8,200 in the 12 month period of the Statistics Canada survey. At a study estimate of an average of $500 per head to Saskatchewan horse owners, this represents about $4 million is revenue. Making the assumption that the other 1,200 horses reported sold out of province were valued at an average of 50% more than the average values used for the horse population as a whole results in an average value for those other horses of about $3 million. The study estimate is that about 1/3 of these other horses were exported to other countries, mainly to the United States with the balance mainly to Italy and other European countries.

The revenue to PMU operations was estimated based on 3,000 producing mares at 120 gallons at an average value of about $1,500/mare. There are about 65 production units, and total industry revenue of about $4.5 million.

Racing revenue was estimated based on a total handle in Regina and Saskatoon of about 11 million in 1989, over a total of 167 race days. The race days in 1989 were about double the number in 1988, representing an upturn due to increased investment and promotion. There were also a small number of race days at Melville, and several other local flat and harness races also featuring Quarterhorses and Arabians. The amount of revenue going to Thoroughbred and Standardbred owners as a share of the handle is estimated at $1.5 million. This is an estimate of the net to owners over jockey fees and other track costs.

There are approximately 60 rodeos held annually in the province, most of which are provided with bucking horses and working saddle horses by a small number of rodeo contractors. Although no separate survey of the contractor's income was carried out, the study estimate is in the range of a total annual revenue of $500,000.

The total revenue flow from outside the Saskatchewan horse owning population is about $14 million annually. Total revenue flows are estimated at $26 million.

5.5 Spectator Attendance

The horse industry is an important attraction for local spectators and tourists in Saskatchewan. Horses provide the most exciting and popular feature for many annual community "homecoming and reunion" events. Several organizers of these local events were contacted during the study and each make the argument that horses provide the excitement for parades, while horse shows, racing competitions and rodeos provide the main spectator attractions. According to organizers, it is common to have rodeos and chuckwagon and chariot races draw more spectators in number than the entire local population, sometimes each day for 2–3 days running.

Saskatchewan tourism provides a listing of local events of interest to tourists. This list identifies about 900 individual attractions that would be of interest, of which approximately 180 involve participation with horses or spectator events involving horses.

The number of horse owners and horses attending events in Saskatchewan is indicated by Table 18, with details provided in Tables 19, 20, 21, 22 and 23. About 4,800 owners, along with 11,500 horses make about 21,500 event entries, mostly in Saskatchewan.

The study estimate for the number of parades in Saskatchewan in approximately 60, of which about 75% are located in centres of less than 5,000 population. The average attendance is estimated at 2,500 for a total of 150,000 spectators. According to a sample of organizers, about 25% of the entries are horse entries with many parades including over 50 individual horses. Based on approximately 2,300 parade entries reported in Table 18, the average number of horses

per parade would be about 38. The average owner would provide 2 parade entries in the province and those entering outside the province would attend an average of 3 parades.

Rodeos are probably the major spectator attraction in the horse industry in the province. There are usually 13 C.P.R.A. rodeos, about 30 C.C.A. rodeos and about 17 unsanctioned amateur rodeo events, for a total of about 60 annually. These events are often associated with chuckwagon and chariot races, sometimes associated with local fairs and community events. There are about 50 chariot and chuckwagon events, about half of which are probably associated with rodeos. The study estimate for average attendance at rodeos is 2,500, usually spread over more than one day. The total estimate for spectator days is 150,000 annually.

Racing is also a major spectator event, with Thoroughbred and Standardbred events in Saskatoon and Regina. Attendance has been fairly stable, although winter racing and video hook ups with other race tracks have been introduced in recent years. Other races include mainly local chariot and chuckwagon races which are not part of rodeos but are usually part of a local fair or community celebration days. It is estimated that about 25 racing events are included in this category with total attendance of 50,000.

There are a large number of horse shows and competitions and breed events in the Province. There were 129 events recognized by a National or International body in 1989. This number included Heritage Shows, Breed Events, Championship Events, and CEF sponsored events, with a combined total attendance of about 80,000.

There were 57 Heritage Shows, recognized by the S.H.F. with C.E.F. permit. These are mostly in the smaller centres and are supported by the S.H.F.

Nationally recognized events included 43 Breed Sanctioned Events recognized by various associations. This included 28 Quarterhorse Shows (A.Q.H.A.); 6 Apaloosa Shows (A.AP.H.A.); 6 Cutting Horse Shows (N.C.H.A.) and 3 Paint Shows.

There were 21 events recognized by the C.E.F. This included 11 Arabian Shows; 4 Open Shows; 4 Dressage Shows; 2 Morgan Shows. There were 8 Championship Events held in 1989, including: Canadian Arabian Horse Championships (The Royal Red); Combined Training and Three-Day Event Qualifiers (2); National Non-Pro Cutting Horse Championship; Canadian Dressage Qualifying Event; Regular and Combined Driving Championships; National Peruvian Peso Championships; and the Canadian National Pony Club Rally.

In addition to the 129 Nationally or Internationally recognized events, there were 25 4H Horse Shows and about 25 Pony Club Shows. The accumulated total for these shows is 180, with an estimated attendance of 100,000 spectators annually.

There are in addition, an estimated 100 horse shows and competitions which do not have official recognition, with an estimated annual attendance of 50,000.

Other events include clinics, heavy horse pulls, and local gymkhana and barrel racing. There were 115 clinics sanctioned by the S.H.F. in 1989, with an estimated spectator attendance of 30,000. There were about 25 heavy horse pulls and about 60 other clinics and miscellaneous events, which probably attracted an additional 20,000 spectators. The total spectators at "other events" are estimated at 50,000 annually.

The total number of annual events as estimated above is 480, with annual attendance of 700,000 spectators, for an average of 1,400 – 1,500 spectators per event.

TABLE 41 ESTIMATE OF ANNUAL SPECTATOR ATTENDANCE AT HORSE EVENTS IN SASKATCHEWAN

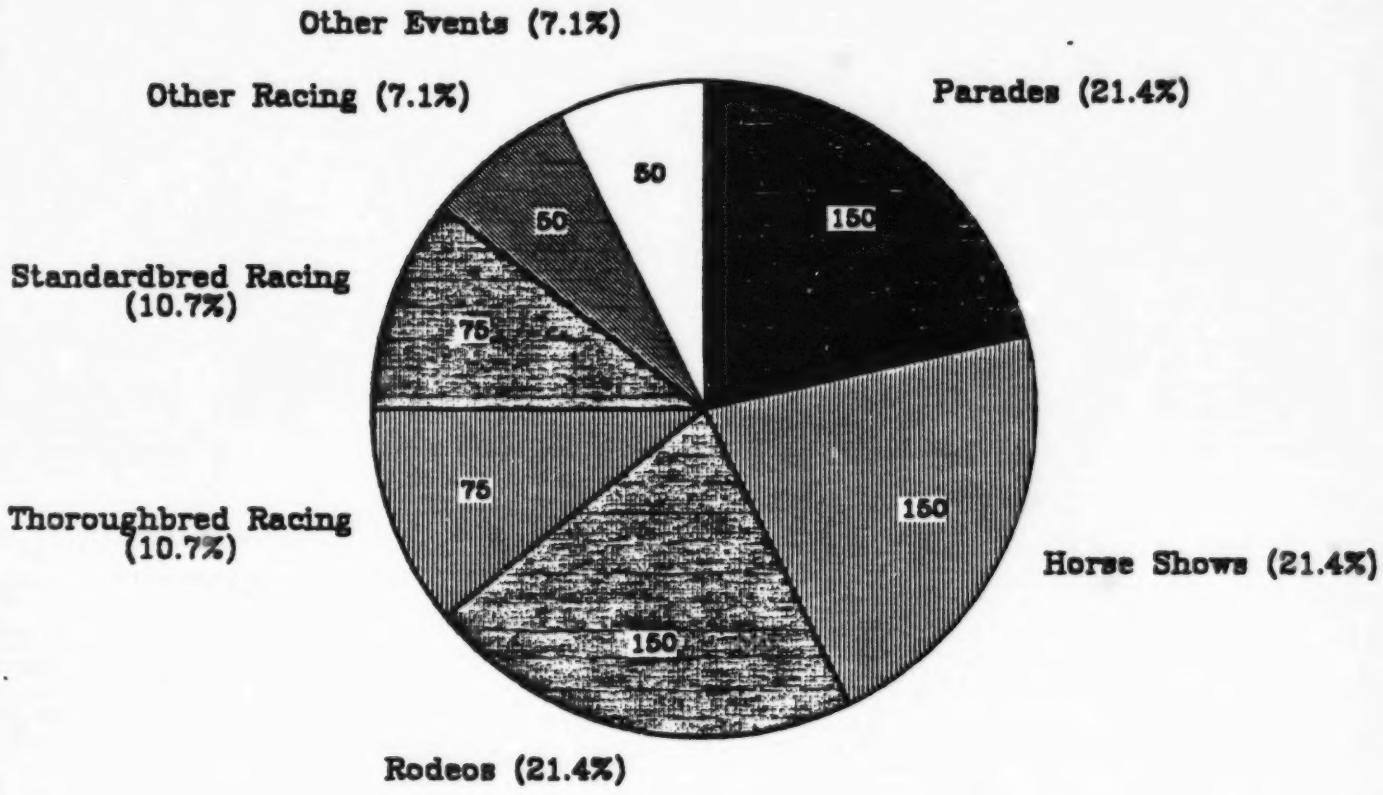
Spectator Events		Number of Spectator Days
Racing		
Standardbred	75,000	
Thoroughbred	75,000	
Other*	50,000	
		200,000
Rodeos		150,000
Parades		150,000
Horse Shows		150,000
Other*		50,000
TOTAL		**700,000**

* Other racing includes chariot and chuckwagon races (which are not part of rodeos) and other local flat and harness races.

* Other events include clinics, heavy horse pulls and local gymkhana, barrel racing, etc.

Figure 7 – Spectator Attendance at Horse Events

(thousands)



An additional note should be considered in relation to Table 41. Based on contacts with event organizers, the total take at the gate for these events is probably in the range of $2–3 million annually, with an additional expenditure on food services on the grounds of $3–4 million. These revenues are an important source of income for the horse associations and community groups who organize these events. The additional expenditure by local spectators and tourists for other local services is probably of a magnitude greater than these amounts. Although no separate survey was completed to provide detailed data, the study estimate is that the horse events reported in Table 41 generate income to the local communities of $15 – 20 million for local food and lodging services alone.

5.6 Human Resources

The commitment of human resources to horse industry activities is difficult to estimate because of the contribution of volunteers connected to association and events, and the usual difficulty of separating recreation time and time spent "working" with horses.

There is no available data which indicates how much time is spent by owners working on the care and management of horses. Husbandry tasks include attending to repairs and maintenance, feed procurement and feeding, animal health, etc. Various estimates have been offered for time requirements for these purposes, resulting in a study estimate for one person year for every 100 horses in Saskatchewan. A total of about 625 can be divided between about 550 person years of unpaid labour and about 75 paid person years associated with the horse business sector. The main users of paid labour are considered to be racehorse owners, breeders and P.M.U. operations.

Voluntary labor provides the main source of human resources for the horse industry. It is estimated that 200 person years of unpaid work are associated with the 480 events, and an additional 25 person years are required to provide administration and leadership to at least 300 clubs and organizations.

There are approximately 5,000 individuals with membership in the S.H.F. This association provides the umbrella structure for 125 groups or associations, including: 48 riding and/or driving clubs; 18 provincial associations; 13 agriculture societies and exhibitions; 18 breed

associations; 10 Arabian clubs and 2 Appaloosa Clubs; 6 junion/youth clubs; 7 F.E.I. Discipline groups; and 3 handicapped clubs.

There are also 100 4-H horse clubs affiliated with the S.H.F., in addition to the 125 listed above. There are 50 C.E.F. recognized officials in the province, including 14 show stewards and 34 judges. The 34 judges are comprised of 7 English, 13 Western, 2 Driving, 8 Breed and 4 Dressage.

There are 87 S.H.F. recognized judges and 23 Breed judges. The Breed judges are comprised of 5 Appaloosa and 18 Cutting Horse judges.

There are in total, 160 certified judges and officials in Saskatchewan. These individuals provide the expertise necessary for the various shows and competitions, and most of their time is provided on a volunteer basis.

There are also an estimated 75 clubs which are not associated with the S.H.F. The estimated total associations and clubs is comprised of 225 affiliated with the S.H.F. and 75 outside, for a total of 300. The study estimate is that 25 volunteer person years are required to provide leadership and administration for these groups.

Estimates of paid labour associated with associations and events are ball park estimates, as no separate survey has been conducted to provide actual data. The study estimate of 25 paid positions was developed by estimating paid positions with horse associations and clubs at 10 - 15, and position equivalents associated with events at 10 - 15. This latter category includes time spent by employees of governments, fairs and exhibitions, local recreation boards, chambers of commerce, event sponsors, judges and others.

Personal service employment includes paid person year equivalent for veterinarians, farriers, instructors, trainers, boarding services, and custom hauling. Total expenditures for these items is estimated at about $10 million annually. Using arbitrary guidelines of 40% available for

payroll at an average of $30,000 per person year, the number of paid person years would be about 125 per year.

Other service sector employment is estimated here based on several arbitrary assumptions. First, the estimates include only local jobs directly associated with expenditures by horse owners and by spectators at events. Second, the employment estimates are based on assumptions about payroll as a % of sales & service revenue, and assumptions about average pay levels for the various supply and service sectors.

TABLE 42 COMMITMENT OF HUMAN RESOURCES IN THE HORSE INDUSTRY IN SASKATCHEWAN

		No. of Person Years	
A.	Unpaid Labour		
	Horse owners Labour Attending to Horses	550	
	Association, Club & Event Volunteers	225	775
B.	Paid Labour		
	Other Service Employment*	200	
	Personal Service Employment*	125	
	Racetrack Employees	100	
	Horse Business Employees	75	
	Association & Event Employees	25	525
	TOTAL PERSON YEARS		**1,300**

* Personal Service includes veterinarians, farriers, instructors, trainers, boarding, custom hauling.

* Other service sector estimates provided in this Table are limited to local construction and repairs, dealer & retail sales & service, feed supply & food services at spectator events

Some of the arbitrary guidelines used for the estimates in Table 42 should be noted. For purchased feed supplies, 15% of an estimated $7 million could be available for payroll and/or living expenses at (say) $20,000 per person year, resulting in 50 person years. For buildings,

improvements, vehicles, and equipment sales and service, 15% of $22 million could be available for local retail & service payroll and/or living expenses at (say) $33,000 per person year, resulting in 100 person years. For the other expenses, 10% of $15 million could be available for various forms of local payroll and/or living expenses, at (say) $30,000 per person year, resulting in 50 person years. The total estimates for paid employment connected with purchased feed and local sales and service is therefore 200 paid person years.

The total primary paid employment is estimated to include 325 person years. This includes racetrack, horse business and association and event employers, and personal service positions such as veteranarians, farriers, instructors and trainers. The total payroll could be approximately $9 million annually.

Secondary employment in local construction, repair and retail trades is estimated at 200 person years. The total payroll for local employees in these sectors could be approximately $6 million annually.

Additional employment through multiplier effects in the manufacturing and service industries is not included in this analysis. Most jobs in the manufacturing sector would occur outsic the province.

The total estimate for the commitment of human resources is therefore 775 volunteer person years and 525 paid person years. It should be noted that these are estimates and do not include any employment in the manufacturing sector or other indirect employment in service sectors.

It should be noted that expenditures by spectators and income flows for food service, lodging and other local services have not been estimated here as part of the horse industry. It is clear that expenditures by 700,000 spectators represents a major economic contribution to the communities in which horse events take place. The human resource requirements for this economic activity are estimated to be in the range of an additional 200 – 300 person years.

5.7 Summary and Conclusions

Total investment by horse owners is estimated at $290 million, with $122 million invested by horse business owners and $168 million invested by owners of recreation and work horses. The average investment per horse is about $6,000 and $4,000, respectively.

Annual operating expenses are estimated at $49 million, with $22 million spent by horse business owners and $27 million spent by owners of recreation and work horses. The average operating expense per horse is $931, and $643, respectively.

Annual replacement requirements are estimated at $21 million, with about $6 million required for herd replacement and $15 million required to replace other depreciable assets.

Total annual expenditures are estimated at $70 million, with about $31 million spent by horse business owners and $39 million spent by owners of recreation and work horses. Feed is the biggest single expenditure at about 30% of the total. Expenses related to buildings, improvements, vehicles and equipment in total represent 31% of annual expenditures.

Annual revenue flows to horse owners are estimated at $26 million annually, with about one half of this total coming from outside the Saskatchewan horse industry. Sales of slaughter horses provide the largest revenue flow from outside the Saskatchewan industry.

Spectator attendance at horse events estimated at 700,000 annually. There are about 500 individual events, with average attendance of about 1,400 spectators. Racing remains the single largest spectator draw at 200,000 spectators.

There are about 300 horse associations and clubs in Saskatchewan. There are about 400 horse shows and clinics annually.

Human resources devoted to the industry are estimated at 775 person years of unpaid time and 525 person years of paid time. Total payroll is estimated at $9 million direct employment and $6 million in local retail and service jobs.

TABLE 43 SUMMARY OF ECONOMIC IMPACT OF HORSE INDUSTRY IN SASKATCHEWAN

	Business	Rec/Work	TOTAL
Total Investment	122	168	290
Annual Operating & Replacement	31	39	70
Cash in-flows	21	5	26
Associated Payroll	12	3	15
Spectator Attendance	400,000	300,000	700,000

Table 43 outlines the main areas of impact associated with the horse industry. The most important conclusion is that horse owners are providing significant enterntainment for local residents, visitors and tourists.

Revenue flows are sufficient to provide opportunities for business success to hundreds of individual horse owners. As a general rule, only well financed, high equity entrepreneurs who have top quality horses and services can succeed in the competitive environment. Competition from horse owners who are not in the "horse business" adds a unique competitive feature not usually found in other industries.

The main economic impact is associated with expenditures in the local economy by horse owners, and with tourist and local spectator attendance at horse events.

Cash inflows to the horse business sector are generally not sufficient to cover annual expenditures. This is to be expected because many horse business people also have horses for personal recreation and do not expect horses to be profitable. If one-third of the horse business owners have one-half of the expenses and two-thirds of the cash inflow, then this group of about 300 - 400 horse business owners would have access to sufficient revenue to cover expenses. PMU operations, Rodeo Contractors and Breeders appear to have the best opportunities as a group. Training and Resale, and Racehorse owners, are probably least likely, on average, to cover expenses. However, successful horse business operations can be found in all categories, due to superior resources, management and marketing.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 THE RECREATION MARKET

Horse industry activities provide an important element of the local recreation and entertainment scene in Saskatchewan. It is in the best interest of the horse industry to build on this strength, and also to expand into the area of marketing horse related family recreation on the farm or ranch and at Provincial Parks. An opportunity exists for entrepreneurs to develop family recreation services featuring horses in a rural setting. Horse holiday farms and ranches could feature trailer facilities and other accommodations, lessons, trail rides, and attendance or participation in local clinics and horse events. Horse recreation opportunities at provincial parks could provide additional attractions for families and tourists.

Officials and leaders in the appropriate Saskatchewan horse associations should be assisted by the Saskatchewan Department of Economic Development and Tourism to make full use of departmental programs in support of small business development. Meetings and seminars with interested potential entrepreneurs should be held as a means of assisting horse owners in becoming aware of available business development programs.

6.2 QUALITY IMPROVEMENTS

The study identified an emphasis on horse events at a wide variety of community programs including feature horse shows, exhibitions and fairs, homecoming events and sports days. The revenue to event sponsors and community businesses from spectator expenditures at these events is estimated to be equal to or greater than the total cash inflow to horse owners from all sources. This high level of participation in community events by horse owners should be maintained and improved from a quality point of view.

Unfortunately, the large percentage of grade breeding stock is not supportive of quality improvement. This situation underlines the need for programs to encourage breeders to put maximum effort into quality improvement.

The matter of quality improvement requires the careful attention of horse owners and the Government of Saskatchewan. Any quality improvement achieved will eventually be transferred to the larger horse population, thereby increasing competitiveness of Saskatchewan horse owners and also increasing the entertainment value of horse events. Programs by horse associations and the government to focus on the need for top quality improvement are therefore recommended.

Programs and policies directed toward this objective will be most effective if introduced on a sharing basis between horse associations and the government. The impact of these awards would be mainly in terms of drawing public attention to improving quality of horses, and providing an added element of prestige and competition and introducing a note of optimism in the industry.

6.3 YOUTH INITIATIVES

Youth initiatives offer the best long term approach to quality improvement among both horse owners and their horses. The study identified over 1,000 young people actively engaged in Horse Clubs and Pony Clubs. Many of these young people will provide the foundation for the horse industry in the years ahead. Increased educational and training programs for young horse owners and club members are recommended. More clinics and other educational programs should be supported jointly by horse associations and government.

Educational programs will bring about improvement in several areas. The very fact of more clinics will contribute toward more and better instruction in the province, while the instruction will increase the ability of young horsemen to manage and exhibit horses, and to better understand the rigid requirements of breed improvement.

6.4 HORSE POPULATION

The present decreasing trend in the horse population should be monitored. If annual decreases of about 3,000 horses per year continue throughout this decade, participation in horse industry activities and their entertainment value could be adversely affected.

6.5 ECONOMIC IMPACT

The economic impact of the horse industry can best be described with reference to investment and annual expenditures by horse owners and spectators. As a general rule, neither horse owners nor spectators expect to make a profit from attendance at horse events. However, the participation by horse owners and attendance by spectators provides the most important element for many community events and tourist attractions in Saskatchewan.

The dichotomy between business and pleasure and the difficulty of placing horse owners clearly in one category or another, makes profitability analysis difficult even for those owners who say their main objective is horse business. The main area of potential growth for the horse business sector is development of business ventures catering to the market for horse related recreation. Development of attractions where the public can actively participate, whether on acreages, farms or at parks, could offer good opportunities to serious horse business entrepreneurs.

The attraction of local horse recreation events, and of services offered by local horse business, should be featured more prominently and promoted more vigorously by the Horse Industry and in Tourist promotion materials. A great opportunity exists for development of horse recreation opportunities at Saskatchewan Parks, and for subsequent promotion in tourism brochures.

The conomic impact of expenditures of 700,000 annual spectators of horse events should be studied in more depth. A profile of spectators, including personal data and spending patterns, would provide useful information to event organizers.

6.6 HORSE RACING

There are two distinct kinds of horse racing in Saskatchewan. Events such as barrel racing, chariot and chuckwagon racing, and some flat racing, are associated with local exhibitions, rodeos and other community events. These events are recreation opportunities for many of the horse owners, whose costs are relatively low, and whose expectation for winnings are also comparatively lower compared to thoroughbred and standardbred racing. These racing events

are popular and draw significant numbers of spectators.

Thoroughbred and Standardbred racing is the more traditional side of the industry and remains the biggest spectator draw for racing fans and spectators. Because investment requirements and annual costs are high, many horse owners have to consider racehorse ownership as a business. There is great financial stress for these owners, as the owners' share of the handle probably does not cover half of the annual expenditure for most horse owners. Changing patronage levels coupled with competition from other entertainment and gambling opportunities are presenting major difficulties.

A major initiative is required to allow racetrack betting to compete more effectively with other forms of gambling. the development of off-track wagering could be an answer, but the question of whether this offers a long-term solution for Saskatchewan should be studied carefully. Provincial action to resolve these uncertainties is required.

6.7 PMU PRODUCTION AND HORSES FOR SLAUGHTER

PMU production is assessed to be economically viable for those involved but a quota system controlled by contracts limits expansion opportunities. There is only one processing plant serving Saskatchewan and the opportunity for expanded production is probably limited.

The profitability of the purchase and sale of horses for slaughter is largely dependent upon purchase and sale prices. In most cases this appears to be an enterprise where low value horses, from a breeding or competition point of view, are salvaged for meat. It appears that most of these horses are not fed, but are collected for transhipment to the packing plant. The potential for value added activity should be identified with particular attention paid to potential rates of gain for various types of horses.

6.8 Horse Industry Participation In This Study

All consultants, specialists and agencies who worked on this study reported great pleasure and satisfaction in having had the opportunity to do so. The pleasure of working on this project was due largely to the enthusiastic willingness of Saskatchewan horse owners to contribute helpful information. Saskatchewan horse owners seem to share a consistent desire to assist in any way they can toward the improvement of the horse industry.

APPENDIX 1

LIST OF LITERATURE REVIEWED

LIST OF LITERATURE REVIEWED

1 Albrecht, Susan C.,HORSE-CENTS: THE ARABIAN MARKET AIN'T WHAT IT USED TO BE, Arizona Business Gazette, V87, N43, S1, p1A, 1987.

2 Anon, HORSE 87: HORSE BUSINESS BECOMES $15.2 BILLION GROWTH INDUSTRY, Agri News, V12, N18, p1, April 30, 1987.

3 Arizona Business Gazzette (abstract), ARABIANS BIG BUCKS IN VALLEY, Arizona Business Gazette, June 9, 1986, Sec.A, p11.

4 Business First (abstract), TAX PROPOSAL WORRIES ARABIAN HORSE INDUSTRY, Business First (Louisville Ky), March 3, 1986, p1-15

5 Courier-Journal (Louisville Ky), OAT PRICES SOAR, ADD TO DROUGHT WOES OF HORSE INDUSTRY, Courier-Journal, July 10, 1988, pE1.

6 Cymbaluk, Nadia F., FEEDING HORSES, Saskatchewan Agricultural Development Fund.

7 Deloitte Haskins & Sells Associates, ALBERTA'S RACE-HORSE BREEDING AND RACING INDUSTRIES OPPORTUNITIES AND CONSTRAINTS, Phases I & II, December, 1986.

8 Ference, Don and Associates Ltd., HORSE INDUSTRY STUDY, Project 271322, Canada - British Columbia Subsidiary Agreement on Agriculture and Rural Development, December, 1984.

9 Fisher, Christy, RACING BOOSTS ENTIRE EQUINE ECONOMY, Houston Business Journal(newspaper article) V18, N9, S1, p15, 1988.

10 Knudson, Thomas J., BETTING ON HORSES PAYS OFF, Farm Futures (abstract), V14, N3, p51-52, March 1986.

11 Lancaster, Hal, TAX PROPOSALLS THREATEN HORSE INDUSTRY, Cooperative Farmer (abstract), V41, N5, p22, September 1985.

12 MacWilliam, David Calixte, THE ONTARIO RACING INDUSTRY: IT'S ECONOMIC PROBLEMS, POTENTIAL, AND SOLUTIONS, University of Guelph, Thesis, 1983.

13 New Jersey Success, SPORTS ARE MAJOR LEAGUE BUSINESS IN NEW JERSEY, TOPPED BY HORSE RACING, New Jersey Success, (abstract), July 1987, p22-27.

14 Owusu-Ansah, J.P.,HORSE INDUSTRY NEEDS TO INPROVE MARKETING SYSTEM, Florida Grower And Rancher, (abstract), V81, N5, p22, May, 1988.

15 Palmer, Lloyd H., PRINCE EDWARD ISLAND HORSE INDUSTRY - A STUDY OF OPPORTUNITIES, Dept. of Agric. & forestry, November 3, 1980.

16 Ritchie, James D., SADDLING UP NEW OPPORTUNITIES WITH MISSOURI'S HORSE INDUSTRY, Today's Farmer, (abstract), V77,N9, p13-15.

17 Saskatchewan Department of Agriculture and Food, CHARACTERISTIC PROFILE OF THE SASKATCHEWAN HORSE INDUSTRY, (Unpublished), March 1988.

18 Woods Gordon, CANADIAN HORSE COUNCIL - THE ECONOMIC IMPACT OF THE HORSE INDUSTRY IN CANADA, February, 1986.

19 Woods Gordon, THE ECONOMIC IMPACT OF HORSE RACING IN CANADA : AN OVERVIEW, January, 1985.

20 Zelmer, Sandra, ALBERTA LIGHT HORSE INDUSTRY, Farm Management Branch, Department of Agriculture, 1972.

APPENDIX 2

STATISTICS QUESTIONNAIRE

SASKATCHEWAN HORSE INDUSTRY SURVEY - 1988

1. As of today, do you own horses or keep horses for others?

Yes	101	—Go to #2
No	102	—End the interview

2. How many horses do you a) own? 103

b) keep for others? 104

Note to Interviewer: Continue with Question 3 if the respondent reports horses owned, in question 2(a), otherwise end the interview.

3. Of the _____ horses you own, how many are in each of the following three categories:

CATEGORY I		CATEGORY II		CATEGORY III	
A specific horse business eg. racing, rodeo, PMU, training, resale or breeding	105	Horses used for work or pleasure on your farm or establishment where your horses are kept.	106	Horses used for work or pleasure off of your farm or establishment where your horses are kept.	107

4. Of the horses in Category I, how many are used for:

Racing	108
Rodeo	109
PMU	110
Training & Resale	111
Breeding	112
	113
TOTAL (108-113)	114

5. Of the horses (reported in 4) used for racing, how many are

Thoroughbred	129
Standardbred	130
Quarterhorse	131
Arabian	132
	133

6. Of the horses (reported in 4) used for rodeo, how many are

Bucking	134
Working Saddle	135
	136

7. Of the horses (reported in 4) used for PMU, how many are:

Thoroughbred	137
Standardbred	138
Quarterhorse	139
Draft	140
	141

8. Of the horses (reported in 4) used for training and resale how many are:

Thoroughbred	142
Standardbred	143
Quarterhorse	144
Draft	145
Pony	146
Arabian	147
Appaloosa	148
	149
TOTAL (112 + 113 + 129 to 149)	150

9. Of the horses in Category II, how many are used for:

Draft	115
Driving	116
Working Saddle	117
Pleasure/Rec.	118
	119
	120
TOTAL (115-120)	121

10. Please give the breed type of the ___ horses used for work or pleasure on your farm or the establishment where your horses are kept, and indicate the number in each breed which are Registered and the number which are Grade.

	Registered	Grade
Arabian	151	166
Quarter	152	167
Appaloosa	153	168
Morgan	154	169
Paint	155	170
Thorough	156	171
Standard	157	172
Pony	158	173
Miniature	159	174
Belgian	160	175
Clyde	161	176
Percheron	162	177
Shire	163	178
Other	164	179
TOTAL	165	180

11. Of the horses in Category III, how many are used for:

Draft	122
Driving	123
Working Saddle	124
Competition/Event	125
Pleasure/Rec.	126
	127
TOTAL (122-127)	128

12. Please give the breed type of the ___ horses used for work or pleasure off of the farm or the establishment where your horses are kept, and indicate the number in each breed which are Registered and the number which are Grade.

	Registered	Grade
Arabian	181	196
Quarter	182	197
Appaloosa	183	198
Morgan	184	199
Paint	185	200
Thorough	186	201
Standard	187	202
Pony	188	203
Miniature	189	204
Belgian	190	205
Clyde	191	206
Percheron	192	207
Shire	193	208
Other	194	209
TOTAL	195	210

COMMENTS

13. Do you have stallions or mares you use for breeding? Yes [211] No [212] — Go to #17

14. How many of your breeding horses are:
(a) Registered Mares? [213]
(b) Registered Stallions? [214]

15. Please list all your breeding horses by breed.

	Mares	Stallions		Mares	Stallions
Arabian	215	222	Pony	229	236
Quarter	216	223	Miniature	230	237
Appaloosa	217	224	Belgian	231	238
Morgan	218	225	Clyde	232	239
Paint	219	226	Percheron	233	240
Thoroughbred	220	227	Shire	234	241
Standardbred	221	228	Other	235	242

16. Of the stallions reported above, please indicate the breed and percentage ownership of each individual stallion.

	Number of Stallions by Percentage Ownership				
	100	76 - 99	51 - 75	26 - 50	1 - 25
Arabian	243	257	271	285	299
Quarter	244	258	272	286	300
Appaloosa	245	259	273	287	301
Morgan	246	260	274	288	302
Paint	247	261	275	289	303
Thoroughbred	248	262	276	290	304
Standardbred	249	263	277	291	305
Pony	250	264	278	292	306
Miniature	251	265	279	293	307
Belgian	252	266	280	294	308
Clyde	253	267	281	295	309
Percheron	254	268	282	296	310
Shire	255	269	283	297	311
Other	256	270	284	298	312

17. a) How many horses did you SELL during the last 12 months?

October 1, 1988 to date [313] None [314] — Go to #18.

b) How many of the horses you sold were sold for:

Breeding	315
Racing	316
Pleasure/Recreation	317
Rodeo	318
Draft	319
Driving (Pleasure)	320
Competition/Event	321
Working Saddle	322
Feedlot or Slaughter	323
P.M.U.	324
Don't Know Use	325
TOTAL (315-326)	326

c) Of these horses sold, please indicate number sold to a buyer residing outside of Saskatchewan.

Breeding	327
Racing	328
Pleasure/Recreation	329
Rodeo	330
Draft	331
Driving (Pleasure)	332
Competition/Event	333
Working Saddle	334
Feedlot or Slaughter	335
P.M.U.	336
Don't Know Use	337
TOTAL (327-338)	338

18. a) How many horses did you BUY during the last 12 months?

October 1, 1988 to date [339] None [340] — Go to #19.

b) How many of the horses you bought were purchased for:

Breeding	341
Racing	342
Pleasure/Recreation	343
Rodeo	344
Draft	345
Driving (Pleasure)	346
Competition/Event	347
Working Saddle	348
Feedlot or Slaughter	349
P.M.U.	350
Don't Know Use	351
TOTAL (341-352)	352

c) Of these horses bought, please indicate number purchased from a person residing outside Saskatchewan.

Breeding	353
Racing	354
Pleasure/Recreation	355
Rodeo	356
Draft	357
Driving (Pleasure)	358
Competition/Event	359
Working Saddle	360
Feedlot or Slaughter	361
P.M.U.	362
Don't Know Use	363
TOTAL (353-364)	364

COMMENTS

19. How many foals have you bred and raised during the last two years? 365 None 366

20. How many stallion services did you sell during the last 12 months? 367 None 368

21. How many times have you used each of the following services during the last 12 months?

Veterinarian	369
Farrier	370
Horse Trainer	371
Western Riding Instruction	372
English Riding Instruction	373
Driving Instruction	374
Riding Arena, Ring, Track	375
Horse transport	376
Feed, Forage & Bedding Supplier	377
Other	378

Note to interviewer: Only ask #22 if the Respondent reported racing horses in #8, box 108.

22. Please indicate the type of race meet in which you usually enter horses and the number of horses you usually enter.

Type of Race Meet	No. of horses usually entered
Thoroughbred	
Regina	379
Saskatoon	380
Other (In Saskatchewan)	381
Out-of-Province	382
Standardbred	
Regina	385
Saskatoon	386
Other (In Saskatchewan)	387
Out-of-Province	388
Quarterhorse	
Regina	391
Saskatoon	392
Other (In Saskatchewan)	393
Out-of-Province	394
Chuckwagon	
In-Saskatchewan	383
Out-of-Province	384
Chariot	
In-Saskatchewan	389
Out-of-Province	390

23. (a) Do you own horses which are entered in events? (eg. parades, shows, fairs, exhibitions, trail rides, etc.) Yes 395 No 396 —Go to #24

(b) How many times did you enter these horses in:

	In Saskatchewan		Out of Province	
	Times Per Yr	# of Horses	Times Per Yr	# of Horses
Parades associated with events such as fairs, shows and exhibitions	397	402	407	412
Showing or competition at fairs, exhibitions, or at other horse facilities	398	403	408	413
Competition showing at breed events, or Nationally recognized CEF events	399	404	409	414
Organized trail rides or drives	400	405	410	415
Other events	401	406	411	416

24. How many of your horses were trained by someone else during the last 12 months?

	Number of Horses	Number of Weeks
October 1, 1988 to date	418	419

25. How many horses did you board at someone else's place during:

	Number Boarded	
October 1, 1988 to March 31, 1989?	420	None 422
April 1, 1989 to date?	421	None 423

26. Do you own an indoor riding arena? Yes 424 No 425

Have you trained your horse(s) between October 1, 1988 and the present?

(a) At someone else's indoor arena? Yes 426 No 427

(b) How many weeks per year? Number of Weeks 428

APPENDIX 3

INVESTMENT AND ANNUAL EXPENDITURE SURVEY

GUIDELINES FOR COST SURVEY INTERVIEWS

PART I INVESTMENT IN HORSES

- For horses not raised by the owner, use the actual purchase price

- Note cases where the owner's estimate of current market values are outside the "usual range" reported by other respondents

- Include 1-2 year olds as young horses (Note the number of 1989 foals, if any)

PART II INVESTMENT ASSOCIATED WITH HORSES

General Guideline

In cases where people or other livestock use the investment items, identify the % attributable to horses. The objective is to provide a reasonable assessment of market value of investment associated with horses.

(1) FARMLAND

* use 10x assessment as a guideline

* use $200/acre as an upper limit of market value for pasture and hayland.

(2) IMPROVEMENTS

* replacement costs for stables, barns, shelters, arenas, fences, corrals, wells, dugouts, pumps, tanks etc., should be estimated with reference to the following guidelines.

(1) stables, barns, arenas, shelters etc. generally use $5-15/ sq. ft. depending on type,

(2) fences and corrals generally use $0.50-3.50/ft. depending on type

* to calculate depreciation factors, estimate remaining value with reference to the following guidelines:

(1) 100% if item less than 5 years old

(2) 75% if item is less 5-10 years

(3) 50% if item is 11-20 years

(4) 25% if items is over 20 years old

* estimate of value = replacement cost x depreciation factor.

(3) VEHICLES AND EQUIPMENT

* for trucks, trailers, tractors and other farm equipment refer to the current used market as a guideline for prices of items of comparable replacement cost, age and amount of use

* for horse equipment such as sleighs, carriages, etc. generally use owner's estimate of market value

(4) TACK, TOOLS, SUPPLIES

* generally use owner's estimate of value
* includes apparal, grooming, supplies and small items of equipment

PART III ANNUAL OPERATING EXPENDITURE

General Guidelines

Annual operating costs generally include actual cash expenditures for a "normal" year. Items not included are principal payments or interest, and labour (make note of the number of employees for "horse business" owners and general wage levels).

(1) LAND AND IMPROVEMENTS

* Use % attributable to horses

* for maintenance generally use at least 2.5% times value of buildings and improvements

(2) VEHICLE AND EQUIPMENT EXPENSE

* use % attributable to horses

* includes mileage for animal care, breeding, shows and competitions, generally use at least $0.30/mile for trailering

* repairs should generally be at least 5% times value of vehicles and equipment

(3) FEED COST

* Generally use values assigned for homegrown feed as:
  - oats at $1.50/Bu.
  - big hay bales at $50
  - square hay bales at $1.50
  - straw bales at $1.00

* include "feed" portion of boarding costs as purchased feed

* include "pasture fees" as a purchased feed.

(4) BOARDING COST

* include stabling costs, but allocate items such as pasture and feed to feed cots and training and instruction components to a separate cost item

* in most cases, most boarding costs may be allocated to feed, training and instruction.

(5) TRAINING AND INSTRUCTION

* include horse training and instruction at all locations, (may include charges for stabling and fees for facilities)

* include arena, ring or track fees for personal recreation and not necessarily associated with lessons or training

(6) ANIMAL CARE

* owner's farrier work should not be included

* other items include insecticides, wrappings, grooming and health products etc.

(7) BREEDING FEES

* include total fees paid for breeding, may include some feed, stabling, pasture and vet and med costs for mares

(8) MISCELLANEOUS

* key items are entry fees, and personal travel for competitions and shows

* other items can include advertising, horse insurance and a share of miscellaneous business expense such as subscriptions, memberships telephone and power costs etc.

INVESTEMENT IN HORSES AND ASSOCIATED ASSETS

CATEGORY : _____

A. MATURE HORSES	Age Yrs.	Is Horse Trained ? Y/N	Trained by Yourself ? Y/N	Raised by You ? Y/N	Is Horse Registered ? Y/N	If Offspring, How Many ? No./N.	Frequency of Use ? per Yr.	Purchased Price ? $	Estimated Value $
(1) Geldings									
(2) Mares									
(3) Stallions									

INVESTEMENT CONT'D

YOUNG HORSES	Age Yrs.	Raised By You ? Y/N	Are You Training ? Y/N	Will Pay Other Trainer ? Y/N	Registration ? Y/N	Keep or Sell ? K/S/DK.	Purchase Price $	Estimated Value $

SUMMARY OF INVESTEMENT IN HORSES

No. of Horses in this category _____ head Estimated Total Value _____

Average Value of Mature Horses $ _____ / head

Average Value of Young Horses $ _____ / head

INVESTEMENT CONT'D

B PASTURELAND	Acres	Type of Fence	Type of Water Supply	Estimated Value	% to Horses
	ac.	3 wire, 4" Posts	dugout, well, etc.	$	%
Native Grass					
Seeded Grass					

C. BUILDINGS & CORRALS	Types of Construction	Year	Size	Replacement Cost	Estimated Value	% To Horses
	wood frame, etc.	19 ___.	l x w	$	$	%
Stables						
Shelters						
Feed Storage						
Corrals						
Others (feed bunks, etc.)						

D. YARDSITE WATER SUPPLY	Size	Year	Replacement Cost	Estimated Value	% to Horses
		19___	$	$	%
Well					
Dugout					
Other (tanks, etc.)					

INVESTMENT CONT'D

E. TRANSPORTATION EQUIPMENT	Year 19___	Size	Miles/Year mi.	Replacement Cost $	Estimated Value $	% to Horses
Trailer/s						
Trucks						
Other						

F. OTHER EQUIPMENT	Year	Age	Replacement Cost	Estimated Value	% to Horses
Tractor/Fel					
Hay Equipment					
Carriages, Carts, etc					
Other (walkers, etc)					

G. TACK	Type	Age	Replacement Cost	Estimated Value
Saddles				
Harness				
Other (specify)				

H. MISC.	General Description	Age	Replacement Cost	Estimated Value
Western/English Wear				
Specialized Tools				
Other (specify)				

SUMMARY OF INVESTEMENT IN ASSETS ASSOCIATED WITH HORSE ACTIVITIES

	Replacement Cost	Estimated Value	Value Attributed to Horses
B. Pastureland	$	$	$
C. Buildings & Corrals			
D. Yardsite Water Supply			
E. Transportation Equip.			
F. Other Equipment			
G. Tack			
H. Misc.			
	$	$	$

ANNUAL EXPENSES ASSOCIATED WITH HORSES

CATEGORY : _____

I. Expenses on Land & Improvements $/Year

- * R.M. tax
- * Repairs & Maintenance
- * Insurance
- * Lease &/or Rental
- * Other _____

Subtotal $

J. Equipment & Vehicle Expenses $/Year

- * Fuel
- * Repairs
- * Lease &/or Rental
- * Other _____

Subtotal $

K. Feed Costs $/Year

- * Purchased Grain & Supplements
- * Purchased Hay
- * Homegrown Grain & Hay
- * Other _____

Subtotal $

L. Boarding Costs

(check ones that apply)	$/Mo./Year	$/Year
Winter		
__ Just a Farm		
__ Indoor Riding		
__ Track		
__ Training		
__ Riding Instruction		
Summer		
__ Just a Farm		
__ Indoor Riding		
__ Track		
__ Training		
__ Riding Instruction		

Subtotal $

ANNUAL EXPENSES CONT'D

M. Training & Instruction $/Year

* Trainers Fees
* Western Riding Instruction
* English Riding Instruction
* Arena, Ring, or Track Fees
* Other _____

Subtotal $

N. Animal Care $/Year

* Vet Service
* Medicines
* Farriers Services
* Supplies
* Other _____

Subtotal $

O. Breeding Fees $/Mare Bred $/Year

* Mare to Stud
* A.I. _____ _____

Subtotal $

P. Miscelaneous $/Year

* Membership Dues
* Subscriptions
* Entry Fees
* Travel For Shows & Competitions
* Communications Costs
* Utilities
* Other _____

Subtotal $

SUMMARY OF ANNUAL EXPENSES

		Normal Yearly Expenses
I.	Property & Improvement Expenses	$ _____
J.	Equipment & Vehicle Expenses	_____
K.	Feed Costs	_____
L.	Boarding Costs	_____
M.	Training & Instruction	_____
N.	Animal Care	_____
O.	Breeding Fees	_____
P.	Miscelaneous	_____
	TOTAL	$